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THE JOURNAL

OF THE KENTUCKY STATE MEDICAL ASSOCIATION

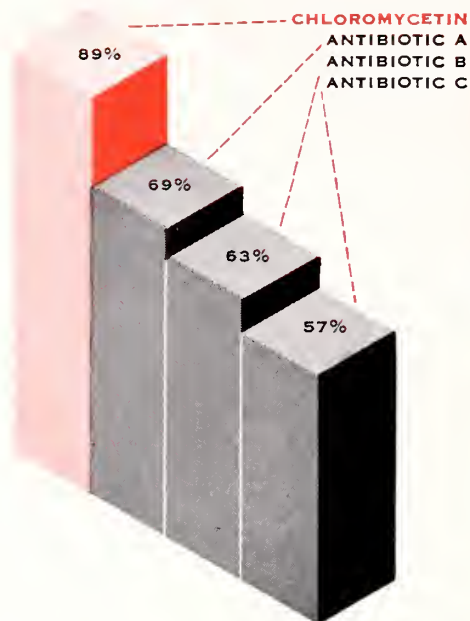


In this issue:

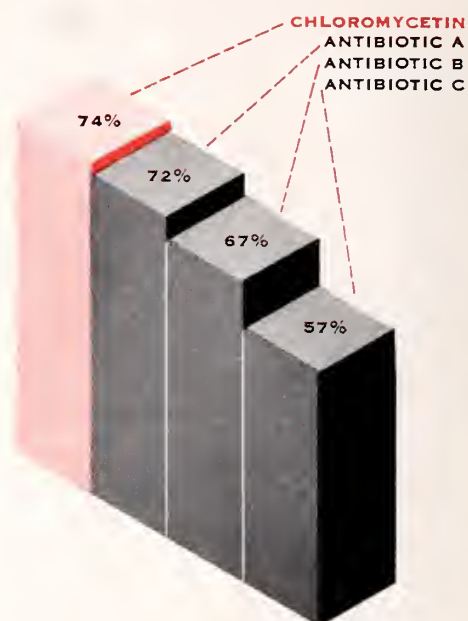
Arrhythmias in Cardiac Emergencies

Diet, Obesity and Heart Disease

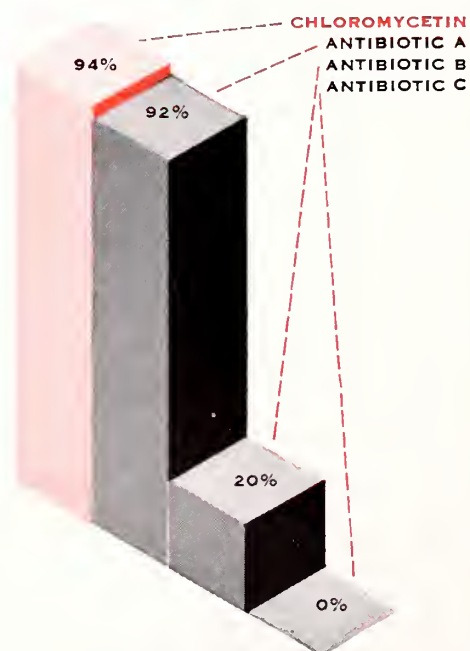
Pitfalls of Pediatric Anesthesia



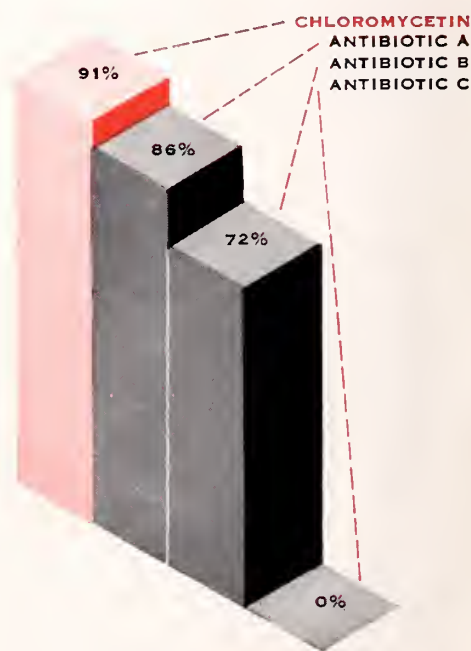
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References (1) Altemeier, W. A.; Culbertson, W. R.; Sherman, R.; Cole, W.; Elstun, W., & Fultz, C. T.: *J.A.M.A.* 157:305 (Jan. 22) 1955. (2) Austrian, R.: *New York J. Med.* 55:2475 (Sept. 1) 1955. (3) Murphy, F. D., & Waisbren, B. A., in Murphy, F. D.: *Medical Emergencies: Diagnosis and Treatment*, ed. 5, Philadelphia, F. A. Davis Company, 1955, p. 557. (4) Weil, A. J., & Stempel, B.: *Antibiotic Med.* 1:319, 1955. (5) Jones, C. P.; Carter, B.; Thomas, W. L., & Creadick, R. N.: *Obst. & Gynec.* 5:365, 1955. (6) Kass, E. H.: *Am. J. Med.* 18:764, 1955. (7) Tebrock, H. E., & Young, W. N.: *New York J. Med.* 55:1159 (Apr. 15) 1955.

This graph is adapted from Altemeier, Culbertson, Sherman, Cole, Elstun, & Fultz.¹



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The JOURNAL of the KENTUCKY STATE MEDICAL ASSOCIATION

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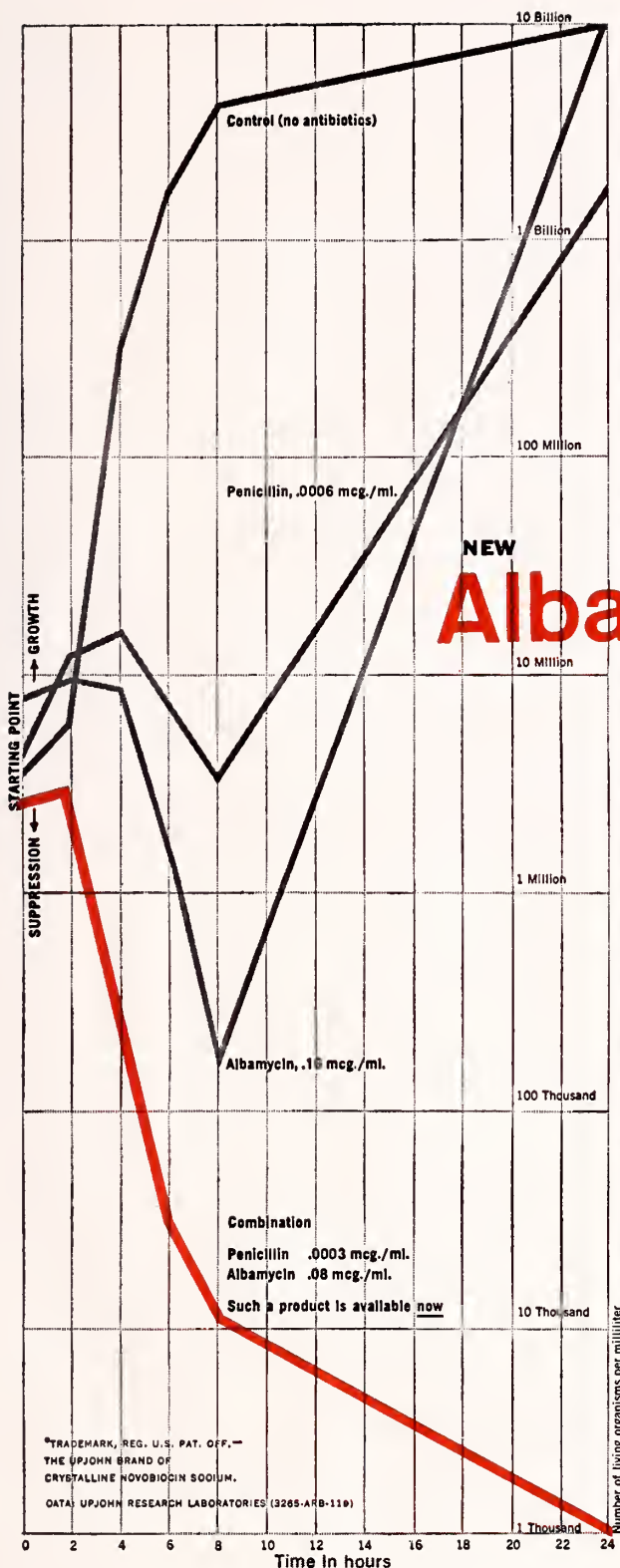
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The three gray lines of this graph show the growth rate of a penicillin-sensitive strain of *Staphylococcus* (*Micrococcus pyogenes*, var. *aureus*) under 3 conditions:

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Johnson McGuire, Professor of Clinical Medicine and Director of Cardiac Laboratory, University of Cincinnati College of Medicine, will serve as moderator for the Symposium

K. J. Franklin, The Medical College of St. Bartholomews Hospital, London.
INVESTIGATION OF WHAT IS CONSIDERED NORMAL FOR THE AGING CARDIOVASCULAR SYSTEM

J. Earle Estes, Jr., Mayo Clinic, Rochester, Minnesota.
VENOUS DISORDERS IN OLDER PEOPLE

Walter S. Priest, Associate Professor of Medicine, Northwestern University School of Medicine, Chicago.
ANTICIPATION AND MANAGEMENT OF CARDIAC DECOMPENSATION

Jessie Marmorston, Professor of Experimental Medicine, University of Southern California, Los Angeles.
HORMONAL ASPECTS OF MYOCARDIAL

INFARCTION IN FEMALE AND MALE SUBJECTS

Ancel Keys, Professor of Physiology and Director of Laboratory of Physiological Hygiene, University of Minnesota, Minneapolis.

CALORIES AND CHOLESTEROL

Robert W. Wilkins, Professor of Medicine, Boston University School of Medicine, Boston.

DRUG THERAPY FOR HYPERTENSIVE VASCULAR DISEASE IN PATIENTS PAST MIDLIFE

Robert A. Bruce, Associate Professor of Medicine, University of Washington School of Medicine, Seattle.

EVALUATION OF FUNCTIONAL CAPACITY IN PATIENTS WITH CARDIOVASCULAR DISEASE

Edward J. Stieglitz, Consultant in Geriatrics, Veterans Administration and St. Elizabeths Hospital, Washington, D. C.

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**message
from
the
President**

Following action by the House of Delegates in a special meeting November 25, our Association is now an active participant in the national program to provide medical care for military dependents under Public Law 569, 84th Congress. This program is known as "Medicare."

While we have grave concern over which direction this program may lead Medicine, we cannot quarrel with the announced purposes of the Act. These are: to provide greater security to families of enlisted men in the armed forces in the hope of reducing wasteful personnel turnover, to lessen the number of physicians being drafted to render professional care to civilian dependents and to minimize the civilian population in military hospitals.

The Defense Department, under Public Law 569, gave the profession the choice of two courses. It has offered to enter into a contractual agreement with the profession in each state to provide medical care for military dependents. Under this agreement, the free choice of physician and fee for service system, along with the right of the physician to accept or reject patients, is preserved. We police ourselves and retain substantial control. The alternative—the Defense Department operates its own program.

The Defense Department is cognizant of objectionable features of Medicare just as we most certainly are. The Department, to this writing, has demonstrated a very friendly, understanding and cooperative spirit. There is ample reason to believe that as long as both our profession and the Department work together in good faith, some of the objectionable features may be dissipated when the present contract which matures June 30, 1957, comes up for renewal.

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A 27-year-old man, a chronic alcoholic, was admitted with a history of an alcoholic spree followed by a cough, greenish sputum and chills and fever.

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The patient was treated with erythromycin, 300 mg. every six hours per os. His temperature dropped to normal by 48 hours and X-ray of the chest revealed considerable clearing by the fourth hospital day. After 10 days hospitalization, the patient was fit for discharge.¹

First Antibiotics Symposium, we reported the successful treatment with erythromycin of *H. influenzae* pneumonia and bacteremia. A second patient with *H. influenzae* pneumonia and bacteremia had a clinical course almost identical to the one previously reported, with cure obtained by treatment with 500 mg. of erythromycin per os every four hours for 14 days.

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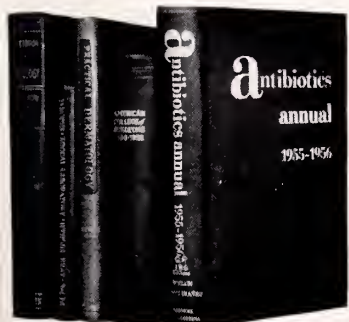
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1. Romansky, M.J., et al., Antibiotics Annual 1955-1956, p. 48,
2. Waddington, W. S., Maple, F. C., and Kirby, W. M. M., A.M.A. Archives of Internal Medicine, 1954, p. 556.

THE KENTUCKY PHYSICIANS' PLACEMENT SERVICE

The Kentucky Physicians' Placement Service is operated by the KSMA for the purpose of assisting physicians looking for locations and communities needing physicians to get together. For more information on the listings below, write: Kentucky Physicians' Placement Service, 620 South Third Street, Louisville, Ky.

Locations Wanted

Tulane University graduate wishes to practice surgery in a community of approximately five thousand people. Member of A.M.A. and F.A.C.S. Available immediately. LW 111

Thirty-two-year-old physician, graduate of University of Louisville School of Medicine, wishes to begin practice in a small community after internship. Will become available July, 1957. LW 112

Thirty-year-old physician, graduate of University of Louisville School of Medicine, desires to practice pediatrics in Louisville, Kentucky. Will be available July 1, 1957, after completion of second year of residency. LW 113

Thirty-year-old physician, graduate of Medical School of Virginia, desires to do general practice as assistant or associate. Available in July, 1957. LW 114

Thirty-four-year-old physician, graduate of the University of Louisville School of Medicine, wishes to do general practice as an associate or assistant. Available in July of 1957. LW 115

Thirty-three-year-old physician, graduate of University of Louisville School of Medicine, desires to practice general surgery in a community of five thousand or more. Would like to associate with another physician. Available July 1, 1957. LW 116

Thirty-seven-year-old physician, graduate of University of Cincinnati College of Medicine, desires to practice internal medicine and chest diseases. Member of American College of Chest Physicians. Available June 30, 1957. LW 117

Twenty-eight-year-old married physician wishes to practice internal medicine in a community of 20,000 or over. Graduate of Duke University School of Medicine. Available July, 1957. LW 118

Physician Wanted

Central Kentucky community needs a general practitioner immediately. Office space available and housing. Civic Clubs include Lion's Club and various other community activities. PW 111

Excellent opportunity: Physician to do general practice as an associate. Must have two to six years experience. Population 500,000 with eight hospitals, medical school and numerous industries. PW 112

General Practitioner needed for approximately two months beginning the 1st of January. Excellent opportunity and may lead to permanent location. PW 113

Western Kentucky community of 1200 desires a physician for general practice. Trade area of over 4000 people with office and living space available. PW 114

Central Kentucky community needs the services of a general practitioner. Prosperous community within twelve miles of hospital facilities. PW 115

Central Kentucky community of 3500 wants a physician for general practice. Located near the Bluegrass section of Kentucky with hospital facilities available within 12 miles. Office and living space can be arranged. PW 116

Western Kentucky community needs a general practitioner. Housing and office space can be arranged. New clinic with one wing empty at present. One physician presently located in this community and would welcome assistance. PW 117

Northern Kentucky community in need of a general practitioner. Hospital facilities within 20 miles. PW 118

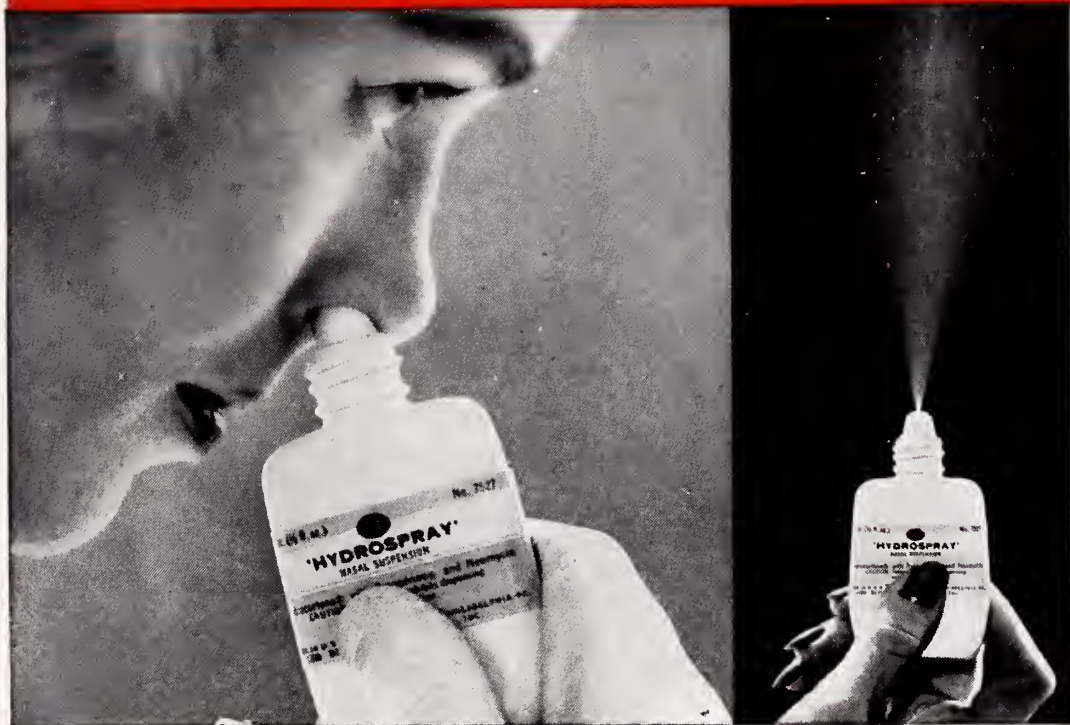
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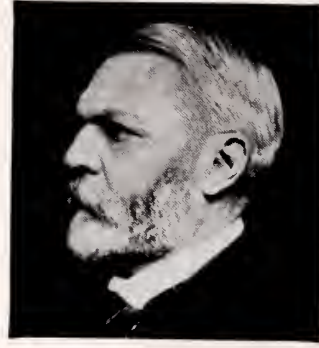
Topically applied hydrocortisone¹ in therapeutic concentrations has been shown to afford a significant degree of subjective and objective improvement in a high percentage of patients suffering from various types of rhinitis. HYDROSPRAY provides HYDROCORTONE in a concentration of 0.1% plus a safe but potent decongestant, PROPADRINE, and a wide-spectrum antibiotic, Neomycin, with low sensitization potential. This combination provides a three-fold attack on the physiologic and pathologic manifestations of nasal allergies which results in a degree of relief that is often greater and achieved faster than when any one of these agents is employed alone. **INDICATIONS:** Acute and chronic rhinitis, vasomotor rhinitis, perennial rhinitis and polyposis.

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REFERENCE: 1. Silcox, L. E., A.M.A. Arch. Otolaryng. 60:431, Oct. 1954.



The man who wouldn't give up

500 MASSED ROCKETS shook the brand-new Brooklyn Bridge, screamed up into the May evening and showered the city with gold.

While behind a darkened window, a big, gaunt man sat and watched, too crippled and pain-racked to attend the opening day festivities for the bridge.

This was a pity, for he had built it.

Which means that when money gave out, Chief Engineer Roebling pleaded for more. When disturbing changes of plan had to be made, Roebling fought them through. And when a hundred panicked men were trapped under the East River in a flooded caisson, Roebling saved them.

Spinning the giant steel spiderweb not only exacted 13 years of Roebling's life, from 1870 to 1883, but very early crippled him forever with the caisson disease.

Yet he saw the job through to the end. His were the courage, skill and vision that make Americans a nation of great builders—a strong, growing nation. And a nation whose Savings Bonds rank with the world's finest investments.

For the constructive strength of 168 million Americans stands behind these Bonds. This is why, when you buy U.S. Savings Bonds, our Government can absolutely guarantee the safety of your principal—up to any amount—and the rate of interest you receive.

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IN THE BOOKS

SALT AND THE HEART: E. T. Yorke, M.D., Publisher, Drapkin Books, 36 East 19th Street, Linden, N. J.

The book is described on the foreleaf as a monograph on a medical subject for general reading. Thus it would seem to have been prepared for lay readers presumably to be purchased on the advice of their physician. The principle theme of the book is concerned with a discussion of measures employed by physicians to achieve a negative sodium balance in the patient with heart disease and hypertension.

Many of the statements while undoubtedly of interest to the lay public are not wholly acceptable to the physician. The latter part of the book is devoted to a poorly organized discussion of a low salt diet with instructions as to its preparation. Several other books have discussed this type of diet with much greater clarity and appropriateness. I cannot recommend the book either as a source of information to the practicing physicians or to be used on prescription to his cardiac patients.

M. M. BEST, M.D.

THE MENNINGER STORY, by Walker Winslow, Doubleday and Company, Inc., Garden City, New York, 1956, 337pp., \$5.00.

As an active worker in the field of mental health, Mr. Winslow's contributions are many. A familiar book on many psychiatric reading lists is his autobiography, *If a Man Be Mad*. This present work, **THE MENNINGER STORY**, a biography of Charles Fredrick Menninger is Mr. Winslow's answer to the question, "What makes the Menningers and Topeka different?"

THE MENNINGER STORY is a kindly tale of how one Kansas doctor's dream came true. Charles F. Menninger is presented as a tolerant studious man who constantly worked to bring better and better medical service to the people of Topeka. He is also a man who could wait for what he wanted.

Flo Menninger, the wife and mother, is seen as a strong, determined woman who never lost the religious fervor of the River Brethren. This faith found expression in her Bible Classes, and her anxiety relief in her almost obsessive control of those about her. To her the greatest sin was to be idle.

The dream of a clinic staffed by his sons and young men like them was inspired by the cooperative spirit that Charles Menninger found at the Mayo Clinic during his 1908 visit to Rochester, Minnesota. Although announced at the breakfast table on his return to Topeka, Dr. Menninger's dream had to await the growth and training of his sons, Karl and Will, and the step by step building of the Menninger Foundation to the world-wide reputation it enjoys today.

Actually the book is a biography of a family. It has to be. It is a story of dedication to the idea that men and women are put on earth by God to use whatever they have to better themselves and those around them.

It illustrates well how one woman's neurotic anxiety can be turned into constructive channels for an acceptable degree of emotional health. It also tells how a great man's tolerance can keep his dream alive.

Mr. Winslow's style reminds one of the life of one of the saints. In places it is romantically inspiring, in others it leans heavily toward sentimentality. A great number of paragraphs almost hypnotically begin with the rhythmic cadence: "Dr. Karl," "Dr. Will," "Dr. C.F."

All in all it is an interesting book that can contribute to one's insight and understanding to a great clinic and a remarkable family that has contributed much to present day psychiatry. It makes worthwhile reading, and the book is recommended for a pleasurable evening.

RAY H. HAYES, M.D.

THE RECOVERY ROOM, by M. S. Sadove and J. H. Cross; W. B. Saunders Co., Philadelphia; 1956 (597 pages).

The authors and 24 contributing authorities have compiled a unique volume containing a wealth of information usable by physicians, nurses and hospital administrative personnel.

The first chapter discusses the advantages and objectives of a recovery room or "intensive therapy unit." Layouts for small and large recovery suites are well presented. Modifications permitting development of a section for treatment of all seriously ill patients, surgical or otherwise, are set forth in detail. This very readable section is richly illustrated with pictures of equipment recommended for the various suites.

The chapter on "Principles of Recovery Room Management" sets forth an excellent philosophy regarding treatment of any ill or injured patient. The management of pain, the use of sedative drugs, a discussion of the advantages of all of the antibiotics, and the treatment of such complications as wound dehiscence, hiccup, nausea and vomiting are presented in detail.

The third chapter entitled "Management of Circulation, Shock, Respiration, and Nutrition," is probably a classic in practical, readable and useful medical writing. The derangements in physiology and the step-by step treatment of these derangements are simply and clearly set forth. This section alone should be required reading for every physician.

The next sixteen chapters, written by recognized authorities, deal with the postoperative care and problems pertaining to the various branches of surgery.

These chapters present the general postoperative care and the specific treatment of complications peculiar to neurosurgery, surgery of the eye, surgery of the ear, nose, and throat, surgery of the chest, laryngology and bronchoesophagology, surgery of the abdomen, surgery of the anorectal disease, surgery of the soft tissues, orthopedic surgery, urological surgery, plastic surgery, the treatment of burns, oncological surgery, obstetrics and gynecology, vascular surgery, pediatric surgery, and the management of medical problems in postoperative surgical patients.

The last chapter's discussion of nursing care in the recovery room should be fully as interesting to physicians as to nurses.

This exceptionally complete and extremely useful volume should be in the library of every physician dealing with surgical or seriously ill patients.

ROBERT PATRICK BERGNER, M.D.

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both mind
and
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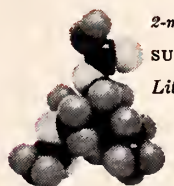
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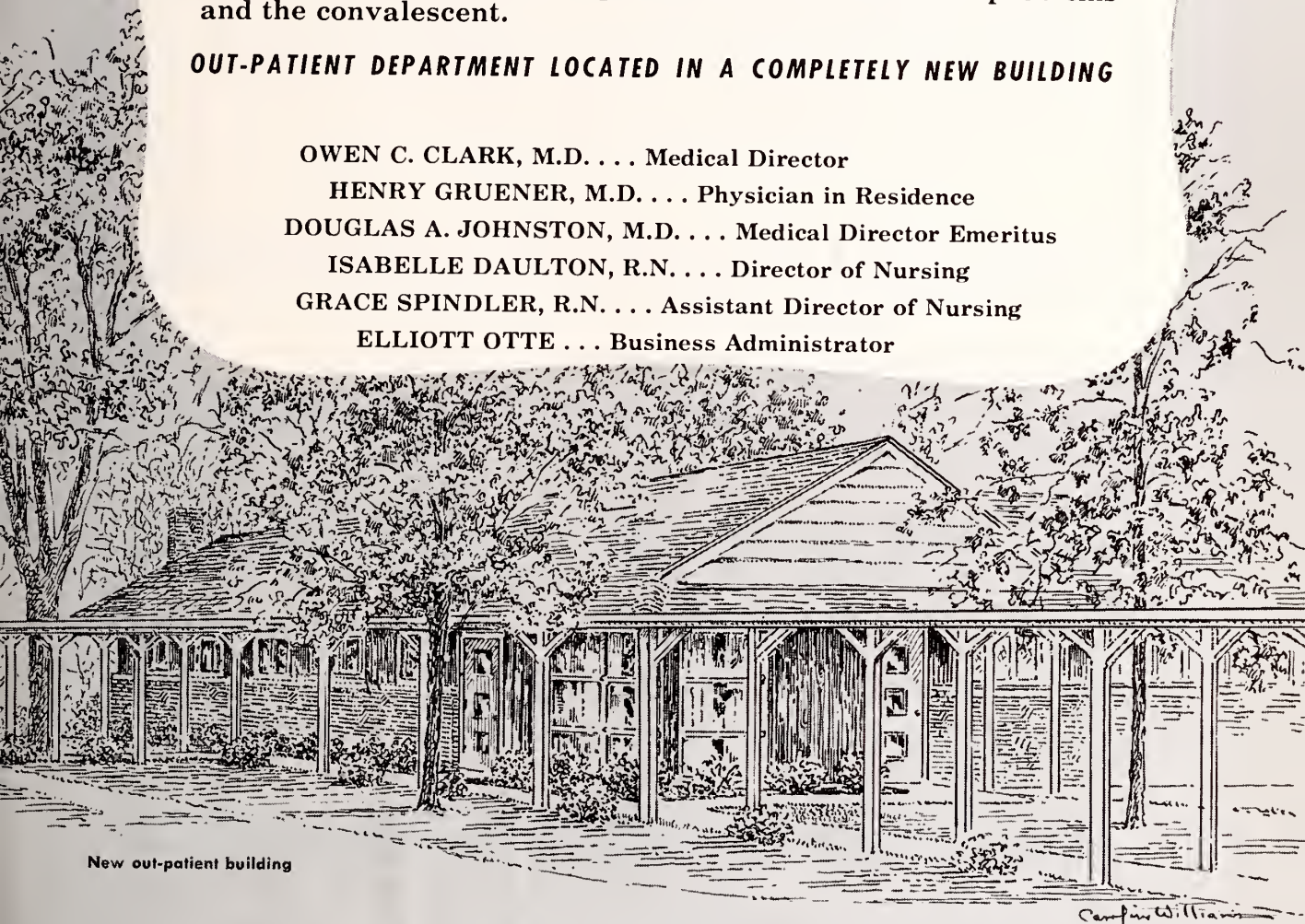
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PUBLIC HEALTH PAGE

RUSSELL E. TEAGUE, M.D.

Commissioner of Health

State of Kentucky

The laboratory of the Kentucky State Department of Health was organized in January, 1911, with the hope that this service would be an effective aid to the practitioners of medicine in Kentucky. Since that early time, the laboratory has continued to hold this as its reason for existence. The great advantages provided physicians by the laboratory can be seen in that during 1955 some 266,013 tests were run on 206,739 specimens by the State laboratory in Louisville and its branch laboratory in Lexington.

These tests were for the most part syphilis serology. However, parasitological studies of stool specimens, bacteriological studies of different body exudates, and a special group of tuberculosis tests were also carried out. In addition, as a differential diagnostic service, mycological tests were run.

In addition to these direct services to practicing physicians the laboratories also perform community service through local health departments such as testing milk and water specimens and working with other agencies on the problem of air pollution in the Louisville area.

The State laboratories have a combined staff of only 44, including the director, technicians, dishwashers, and specimen packers; but in addition to the above work load, another program is supported. In a yearly visit, one member of the staff visits each of Kentucky's 170

local laboratories to help evaluate techniques and iron out any difficulties that may exist in serological diagnoses. As a follow-up to this visit, each one of the laboratories is requested to run 100 serological specimens prepared and distributed by the State laboratories so that the efficiency of its tests may be evaluated.

We are hoping that with this evaluation program, the practitioner of medicine in the area of one of these 170 laboratories will use its services for his premarital and prenatal blood specimens. If more persons having the premarital or prenatal tests received the service from the local laboratories for a small fee, the State laboratories would have more time to enlarge and improve services.

At the present time we are planning to give even better future service to the physician in everyday practice. It is our hope within the year to set up a virus diagnostic laboratory at the State Department of Health in order that we may help with the difficult, nondescript cases of pneumonia, "summer cold," "flu," and even the "old-fashioned cold." To this end, we plan by July, 1957, to be able to present to you a list of serological services in virus disease.

If these services that exist and the ones that are being added year by year will give you a more effective way of handling your difficult diagnostic problems, then our responsibility as a health department of your State Government has been in some degree fulfilled.

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WASHINGTON NEWS DIGEST



The Month In Washington

Washington, D. C.—A new venture in federal medical care—the armed forces dependents medical care program—was launched on schedule December 7, and 2 million dependents of servicemen became eligible for hospitalization and extensive medical care.

The “medicare” program, because it is a pioneer effort, will be watched closely by members of Congress, the armed services and the medical profession. Congress will be interested in keeping track of the cost of the program as well as the availability of care.

The Defense Department has earmarked \$41 million for the program through next July 1. Thereafter it is estimated the cost will run between \$60 million and \$70 million a year. When the program is operating at its peak, as many as 800,000 dependents not now getting care at U. S. expense are expected to be participating.

In all but a few states, provision of medical care outside military facilities is being made under agreements signed between the state medical societies contracting agent (generally Blue Shield) and the Army which is the executive agent for Defense.

The contracts run for seven months, and all states are expected to renegotiate contracts prior to their expiration next July 1. New contracts naturally would reflect the experience gained since December 7.

As the vast new project went into force, the newly created Office of Dependents Medical Care (ODMC) stressed that the law intended that civilian medical care under the program should be comparable to that provided in armed services facilities. Participating physicians receive payment in full from the government under a published schedule of allowances. ODMC said this means that the doctor will receive payment for his usual charge or the amount set in the schedule whichever is less.

ODMC made these additional points:

1. In instances in which the physician believes that an allowance greater than that prescribed in the local schedule is justified, he should look to the government rather than the patient for payment. Provisions have been made for him to submit a special report to his state medical society and, the society, in turn, to the government.

2. Military dependents may submit as identification their post exchange card, the combined post exchange-commissary-military medical care card, or the standard military dependent identification card. A special medicare card is being prepared, and after next July 1 will be the only identification allowed for this purpose.

3. There are no plans in Defense for authorizing payments for drugs, medicinals or other medical supplies, except those furnished while hospitalized or those administered directly by a physician.

4. The claim form to be used by physicians in the medicare program is called “Statement of Services Provided by Civilian Medical Sources.” ODMC said sufficient supplies have been furnished by all state agents.

5. The law and implementing regulations do not permit payment for any medical care, services or hospitalization prior to December 7; this includes prenatal care.

* * *

The broad outline of legislative proposals to come from the administration in newly convened 85th Congress was first sketched by HEW Secretary Folsom in several appearances before newsmen in December. Among them are: (1) federal grants to medical schools for teaching facilities, (2) authorization for smaller insurance companies to pool resources without violating the anti-trust laws in effort to encourage expansion of voluntary health insurance, (3) increased attention to problems of older persons, particularly in health and adult education, (4) continued expansion and improvement in vocational rehabilitation, and (5) expansion of staff and facilities of the Food and Drug Administration.

* * *

Following up President Eisenhower's plea for increased utilization of backed up stocks of Salk poliomyelitis vaccine, Secretary Folsom told a National Press Club audience: “. . . we have a new danger—the danger of public apathy. It is ironic that in the face of such a dread disease, larger quantities of the vaccine are not being used.” The President has urged that the vaccine be given additional groups, including young adults.

* * *

NOTES:

A “package” bill combining both basic and major medical expense insurance is being worked on by the Government for its civilian employees . . . A special advisory committee headed by Dr. Russell Nelson of Johns Hopkins Hospital has asked hospitals to set up pilot projects to see how to revise care given long-term patients in hospitals, and also cut costs . . . The national illness and disability survey voted by the last Congress will be supervised by Forrest E. Linder, Ph.D., former head of social statistics for the United Nations.

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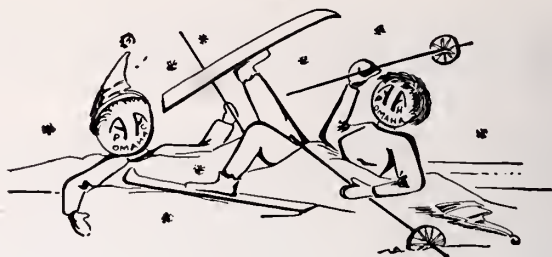


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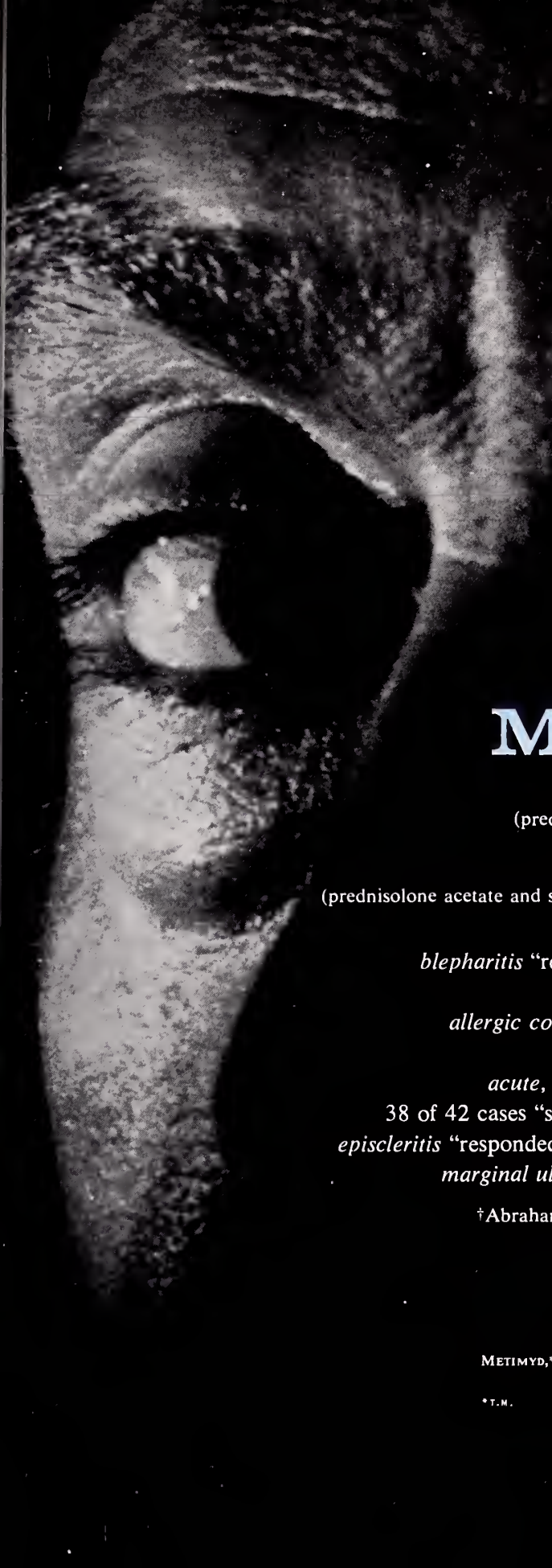
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†Abrahamson, I. A., Jr., and Abrahamson, I. A., Sr.:
Am. J. Ophth. 42:482, 1956.

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The JOURNAL of the Kentucky State Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 55

JANUARY, 1957

NO. 1

THE PROBLEM OF ARRHYTHMIAS IN CARDIAC EMERGENCIES*

I. FRANK TULLIS, M.D., F.A.C.P.**

THE practicing physician is confronted regularly with cardiac arrhythmias both in the otherwise well and healthy individual and in the patient with heart disease. In the majority of instances the diagnosis and management of such arrhythmias can be accomplished rather leisurely and often times the arrhythmia is only one part of the larger general problem.

Significantly often, however, a cardiac arrhythmia becomes the very primary factor in a clinical picture, producing varying degrees of a cardiac emergency or crisis. Disturbances of rhythm may also intervene as complications of some other cardiac emergency or as a complication of the therapy being given. While such events occur only under somewhat chosen circumstances, they happen often enough to be pressing challenges to the physician, and regardless of many other aspects of the picture, attention must be focused on the arrhythmia itself and treatment directed toward its control.

In the event the underlying ectopic rhythm is not recognized as the primary factor in some cardiac crises, an important phase of treatment may be overlooked. In some instances the role of the arrhythmia is immediately obvious, but in others only a high index of suspicion will lead to the proper conclusion. Where an episode so closely resembles myocardial infarction with circulatory collapse, it is understandable how an underlying tachycardia might not be detected in physical examination under adverse circumstances. Such was the experience in one of the cases presented here, a situation of com-

plete circulatory collapse, in which the underlying arrhythmia was hardly identifiable even in retrospective examination except by the electrocardiogram.

Clinical Illustrations

The following six patients are typical examples of several of the clinical emergencies that can be produced by arrhythmias. In some the ectopic rhythm constituted the primary problem and in others it seriously aggravated an existing cardiac crisis.

CASE 1. H.B.W., a 66-year-old white male, known from periodic health examinations to have no definite heart disease, was struck suddenly, while crossing the street, with fullness and discomfort in the anterior chest, shortness of breath, and weakness to the point of near collapse. Pallor, cold skin, and sweating were prominent. Blood pressure was 90/60. Heart was quite regular with rate 187, showing no change on carotid pressure or the Valsalva maneuver. Electrocardiogram demonstrated atrial tachycardia. The rhythm reverted to sinus ten minutes following 0.8 mgm. of Cedilanid® intravenously, with only residual weakness. Subsequent history disclosed two previous attacks during his twenties but with far less general distress.

COMMENT: In this instance paroxysmal atrial tachycardia occurred in a person probably with impaired coronary reserve, and the combination precipitated a clinical picture of a mild cardiac emergency. The patient, however, was quite able to cooperate and the primary nature of the tachycardia was immediately evident. That this is not always true is illustrated in the next case.

CASE 2. W.B.A., a 63-year-old white male was seized at the bank with anterior chest pain radiating down the left arm, became weak, and slumped to the floor, moaning and groaning in general distress. He was rushed to the hospital, admitted directly to a room and placed in an oxygen tent. On examination by the admitting intern he was semiconscious, groaning and twisting restlessly, and indicating vaguely in response to questions a lower retrosternal pain. Pallor, cold skin, and sweating were prominent. Blood pressure and radial pulse could not be obtained. Examination was hampered markedly by restlessness and moaning.

*Presented on September 18, 1956 during the KSMA Annual Meeting in Louisville.

**From the Department of Medicine, University of Tennessee, Memphis.

With presumptive diagnosis of myocardial infarction, Demerol® was given and glucose in distilled water was started intravenously. Emergency electrocardiogram demonstrated ventricular tachycardia. On repeat examination of the heart after studying the tracing, the sounds could be heard so faintly under the adverse circumstances that the rate of 200 could barely be demonstrated.

Procaine amide, 500 mgm., was administered slowly through the infusion tubing in small amounts over a period of 30 minutes. Within 15 minutes there was abrupt cessation of the ventricular tachycardia, followed in succession by auricular fibrillation and ventricular premature contractions, at first multifocal and later unifocal, and finally by sinus rhythm.

Subsequent history disclosed myocardial infarction four years previously, but studies revealed no convincing evidence that fresh infarction had occurred with his present episode.

COMMENT: Here the cardiac arrhythmia, ventricular tachycardia, presented a picture resembling myocardial infarction, with marked circulatory collapse. The circumstances were such that physical examination did not demonstrate the primary problem of a heart rate of 200 per minute. Establishing the diagnosis by the electrocardiogram changed the treatment plan entirely to one of interrupting a serious arrhythmia.

While the final decision in this particular patient was that fresh infarction had not occurred, a clinical picture such as this could well have been the result of immediate myocardial infarction with ventricular tachycardia developing quickly as a complication.

CASE 3. J.C., a 57-year-old white male had been observed some three years with rheumatic mitral valve disease of such degree to produce symptoms of only mild fatigue, exertional shortness of breath, and periodic cough. Findings included sinus rhythm, slight cardiac enlargement, grade 2 systolic apical murmur, loud pulmonic second sound, and mild pulmonary congestion. With only weight reduction he had little trouble and worked regularly and hard in his grocery.

At 2:00 o'clock one morning he was awakened suddenly by acute dyspnea and cough and detected cardiac irregularity himself. He was pale, dyspneic, apprehensive, cold and sweating. Blood pressure was 120/80. Wheezing and moist rales were heard in both lungs, and the liver extended two fingers below the costal margin. Physical examination and the electrocardiogram disclosed atrial fibrillation with a ventricular rate of 168. Response was excellent to rapid digitalization with oral Gitaligin.®

While shaving one week after this episode he noted sudden aching pain and a cold numb sensation in his left lower extremity from hip to foot. Over a period of three hours the distress seemed to shift back and forth from one leg to the other but then improved somewhat. On examination his legs were only slightly cold and pale. The left femoral pulse was reduced, and both popliteal and foot pulses were markedly decreased. Atrial fibrillation persisted with ventricular rate of 86. Effective anticoagulant effect was achieved in four hours with Depro-Heparin® and Medulin,® but two days later, after improving dramatically and still fibrillating,

he suffered a left carotid embolism with right hemiplegia. Embolectomy was performed by Dr. Richard DeSaussure, the embolus being removed from the bifurcation of the carotid artery, but unfortunately a tail of the clot must have passed high into the internal carotid since there was little clinical improvement following surgery.

COMMENT: This patient suffered no significant impairment from his rheumatic valve disease until atrial fibrillation suddenly appeared and led in rapid sequence to congestive heart failure, probable small aortic bifurcation embolism, and finally paralyzing left carotid embolism not significantly improved by embolectomy.

If atrial fibrillation had not developed, it is reasonable to assume this patient would have continued without seriously impaired cardiac reserve. While thrombosis might have occurred within a heart chamber beforehand, it is more likely that clotting occurred in the left atrium after fibrillation developed. Then, without conversion of the rhythm, there occurred a heralding peripheral embolism, and still without change in rhythm and even with effective anticoagulant to prevent additional thrombosis, massive carotid embolism occurred.

CASE 4. R.B., a 44-year-old white male had sudden onset of a severe retrosternal and left upper arm pain, marked weakness, and vomiting. On examination he was cold, sweating profusely, and quite cyanotic. Blood pressure was 80/60. Heart was regular with a rate of 33. Electrocardiogram disclosed posterior myocardial infarction and complete AV block with atrial rate of 106 and ventricular rate of 33. Following an infusion of Levophed® 4 mgm. in 1000 cc. of glucose in water, there was definite clinical improvement.

Eight hours later the patient developed a regular tachycardia of 180, at which time electrocardiogram disclosed ventricular tachycardia. Over a period of 36 hours he was given in succession Pronestyl,® 500 mgm., intravenously, quinidine gluconate intramuscularly in doses of 0.56 Gm. initially and 0.2 Gm. every two hours for three doses, followed by quinidine sulfate orally 0.2 Gm. every three hours and then 0.4 Gm. every two hours for seven doses daily. He received 40 mEq. potassium chloride in 500 cc. 5% glucose in water one day with no effect, and while this same infusion was being repeated the following day at a rate of 0.5 mEq. per minute, the tachycardia suddenly stopped. Following a period of second degree heart block the cardiac mechanism reverted to sinus rhythm, and the patient had an uneventful recovery.

COMMENT: Here the cardiac emergency of myocardial infarction was seriously complicated first by complete A-V block and slow ventricular rate of 33. Then the picture was complicated by ventricular tachycardia which at least in part was most likely precipitated by the use of Levophed to maintain the blood pressure.

From subsequent experience we would have approached this problem differently today, using first isopropylnorepinephrine (Isuprel®) to increase the ventricular rate in complete A-V block. Then, had ventricular tachycardia supervened, potassium chlo-

ride infusion would have been used initially, to avoid both procaine amide (Pronestyl) and quinidine in the face of the A-V block. This will be discussed further below.

CASE 5. L. R., a 45-year-old white male experienced restlessness, nausea, and vomiting following an alcoholic spree and developed suddenly a severe epigastric and upper back pain, general collapse, and moderately severe dyspnea. On admission to the hospital some ten hours after onset, he was cold, clammy, cyanotic and moderately dyspneic. Blood pressure was 70/50. Electrocardiogram revealed atrial flutter with variable A-V block (ventricular rate varying from 88 to 190 per minute) and with runs of ventricular tachycardia.

Therapy included nasal oxygen, Wyamine®, and finally Levophed infusion to maintain the blood pressure. There was reluctance to use digitalis preparations because of the runs of ventricular tachycardia. Quinidine gluconate 0.65 Gm. in 150 cc. of 5% glucose in water was given intravenously very slowly. Within 30 minutes the patient developed ventricular tachycardia with a ventricular rate of 210 per minute. Pronestyl, 600 mgm., was then given intravenously and the patient's rhythm promptly reverted to atrial flutter with a ventricular rate of 145 per minute. He was then given Cedilanid, 1.2 mg. total, intravenously, in three doses over a period of three hours. After the second dose (total of 0.8 mg.) the rhythm reverted to normal sinus mechanism. Maintenance digitoxin was continued for about one week.

Although the reversion was completed by twelve hours after admission, it was necessary to administer Levophed off and on for the first three days of hospitalization in order to maintain an adequate blood pressure. The later course was complicated by a slough of superficial tissue on the lower leg where Levophed extravasated during the early emergency period.

The etiology of the arrhythmia was never determined although the whole episode clearly followed nausea, vomiting, and general distress that terminated an alcoholic spree. Subsequent survey of the problem presented no other evidence of organic heart disease. Although there were few minor nondiagnostic electrocardiographic changes in several tracings, there was no real evidence, clinical or electrocardiographic, to favor myocardial infarction.

COMMENT: In this instance atrial flutter alone produced a clinical picture strongly suggestive of myocardial infarction. Therapy was a problem primarily because of the short runs of ventricular tachycardia, but one is impressed that the quinidine we elected to use was instrumental in causing full-blown ventricular tachycardia. Finally intravenous digitalis, although after Pronestyl, seemed to produce the most beneficial effect, and we had the feeling, retrospectively, that digitalis initially for the atrial flutter might have been the drug of choice in spite of the runs of ventricular tachycardia.

CASE 6. F.T.T., a 64-year-old white male had sudden onset of nausea, vomiting, epigastric and retrosternal pain radiating to the neck and shoulders, dyspnea and sweating. Initially blood pressure was 110/70 and heart rate 50. Electrocardiogram disclosed acute anterior myocardial infarction with complete AV

block and idioventricular rhythm from multiple foci. He became worse rapidly and developed convulsive seizures at which time blood pressure and pulse could not be obtained. Repeat electrocardiograms confirmed that myocardial infarction had been extensive, the AV block persisted, and the seizures coincided with either marked slowing of the idioventricular rate or complete ventricular asystole. Isuprel, 0.2 mg. subcutaneously, had no effect, but intravenous infusion consisting of 1 mg. Isuprel in 200 cc. 5% glucose gave dramatic improvement. Ventricular rate rose to 64 per minute and blood pressure to 90/60, and both were maintained by Isuprel infusion alone over a period of 60 hours, although ventricular asystole with convulsions occurred each time an attempt was made to withdraw the drug. The infusion rate had to be increased to maintain the effect, and finally the patient expired with irreversible shock.

COMMENT: In this instance the complete AV block with very slow idioventricular rate and periods of asystole was a most serious complication aggravating a critical problem. The final impression gained was that management of the AV block successfully increased the ventricular rate and by so doing elevated the blood pressure. Had not the infarction itself been so extensive the patient might well have been carried through his acute illness by intensive attention to the disturbed heart rhythm.

Discussion

The arrhythmias that are most likely to produce or seriously aggravate a cardiac catastrophe include atrial tachycardia, atrial flutter, atrial fibrillation, ventricular tachycardia, and complete AV block.

These arrhythmias by no means always produce cardiovascular emergencies. Some occur in normal hearts, and some develop as relatively simple complications in a long natural history of organic heart disease. Atrial tachycardia is more commonly seen in relatively young people with no structural heart disease, as a distressing, but harmless problem. While atrial flutter is more often associated with organic heart disease, some patients have a high degree of AV block such as 4:1, in which cases the ventricular rate is not rapid and produces no serious symptoms. Atrial fibrillation is also more often associated with organic heart disease, but occasionally there is a slow ventricular rate with only minimal pulse irregularity. Even ventricular tachycardia can be present with relatively slow rate and not produce great distress. In complete AV block many patients tolerate the slow ventricular rate quite well.

Under specific circumstances, however, all of these tachycardias can produce serious emergencies primarily because the rapid ventricular rate leads to insufficient diastolic filling and decreased stroke volume. This happens in elderly people with latent coronary insufficiency, in patients with known coronary insufficiency, and in patients with other forms of organic heart disease when there already exists a degree of functional impairment which has been improved either by restricting demands on the heart or by digitalis and other therapy. Serious episodes are more

apt to occur when the ventricular rate is quite rapid. This would be expected in atrial tachycardia or atrial fibrillation when ventricular rates are 200 or more, and in atrial flutter when there is 2:1 AV block or 1:1 rhythm. The abnormal mechanism of ventricular tachycardia is quite prone to produce a violent episode because of its tendency to occur in serious heart disease often with the added problem of digitalis toxicity.

The clinical picture may be either a coronary insufficiency syndrome or congestive heart failure. In the former there may be chest pain, mild to severe, with dyspnea, pallor, sweating, weakness and even collapse. Blood pressure may drop to unobtainable levels, and if the episode persists, irreversible shock develops. In all respects the picture may resemble that of acute myocardial infarction, and unless one is careful the true nature of the problem can be missed, especially when the heart sounds are hard to hear and examination is made difficult by labored breathing, grunting, and groaning. In addition, the fast ventricular rate can lead rapidly to heart failure either as acute pulmonary edema or as progressive congestive failure.

Complete AV block produces a serious situation when there occurs an extremely slow ventricular rate, ventricular asystole, or runs of ventricular tachycardia or fibrillation.¹ While it too may produce the clinical pattern of coronary failure or congestive heart failure, the striking catastrophe that it usually presents is the Stokes-Adams episode of fainting or loss of consciousness with shock or convulsive seizures.

As mentioned earlier these arrhythmias may be the primary problem in the acute episode they have produced, or they may develop as a complicating factor in other situations. These latter include arrhythmias developing just after acute myocardial infarction, those appearing during the course of congestive heart failure without special precipitating factors, and those that develop unexpectedly following therapy with digitalis and other preparations. Cole, Singian and Katz² reported that 20 per cent of their series of patients with acute myocardial infarction developed some ectopic rhythm. A number of these were simple premature systoles, but atrial tachycardia, flutter, and fibrillation, ventricular tachycardia, and AV block were among the most common. In general when either a rapid ventricular rate of one of the tachycardias or an extremely slow rate of complete AV block is added to a given cardiac crisis, it intensifies the clinical picture, producing a greater degree of shock or precipitating congestive heart failure. Often therapy that corrects the arrhythmia will result in return of blood pressure to normal from a shock state or will eliminate congestive failure without the help of additional therapy.

It is ironic that practically all of the drugs so useful in problems of the heart have actually caused many of these arrhythmias. Practically all arrhythmias can occur as a manifestation of digitalis toxicity, with ventricular tachycardia the traditionally dreaded disorder. Besides digitalis, ventricular tachycardia has also been observed following treatment with quinidine^{3,4,5}, procaine amide (Pronestyl)^{3,6} and norepine-

phrine.^{7,8} When there is AV block, both quinidine and procaine amide have led to ventricular standstill, deformed ventricular contractions, and ventricular fibrillation.^{6,9,10}

Treatment

The first steps in treatment are the simultaneous determination of the ectopic rhythm present and the assessment of the clinical significance of the arrhythmia. The conventional 12-lead electrocardiogram defines most of the abnormal mechanisms, although occasionally esophageal leads are valuable to determine atrial activity. The saline tube method for esophageal leads described by Brody, Harris and Romans¹¹ is a method that produces little inconvenience and can be applied in the emergency situations presented by arrhythmias. It is important to assess the part played by the ectopic rhythm since, as mentioned earlier, all arrhythmias do not produce serious distress. It is a safe premise, however, that any serious alteration of ventricular rate from normal is distinctly important in any crisis of coronary insufficiency, shock, acute pulmonary edema, or acute congestive failure.

In the tachycardias, the physician should determine the effect of vagal stimulation sometime during the early period of coping with the problem. While it may increase the ventricular rate by altering the AV block in atrial flutter, it may successfully terminate atrial tachycardia or even ventricular tachycardia. Carotid sinus pressure, left and right separately, forceful mechanical gagging, and compression of the abdomen lend themselves most appropriately to urgent situations. The risk of detachment of the retina seems sufficient to discontinue the practice of eyeball pressure routinely, and apomorphine should never be used¹². By all means, little of the precious time should be lost with vagal stimulation since it can be tested while the physician thinks and medications are being readied.

Since various episodes of cardiac arrhythmia are so different, it is not surprising that different drugs and methods of administration have been proposed. It is imperative for the practicing physician to have a clear concept of the drug he should administer initially in a given situation, and thereafter, in the cases that refuse to follow the desired course, he will have reasonable time to consult standard texts or some of the excellent review articles on the subject^{12,13} in order to decide on the best procedure. The following are suggested as the initial drugs in those instances in which the circumstances are such that the arrhythmia produces a cardiac crisis as outlined above or when the arrhythmia complicates some other cardiac crisis.

Atrial Tachycardia. When this ectopic rhythm produces the cardiac emergency or when it develops in a patient with acute myocardial infarction with shock or congestive failure, the intravenous injection of digitalis is the treatment of choice. An effective method is Cedilanid, 1.6 mg. intravenously slowly in two to four divided doses one to four hours apart. Repeat carotid pressure will often abolish the tachycardia after initial doses of digitalis.

When atrial tachycardia complicates acute myocardial infarction without shock or congestive failure, oral quinidine is the treatment of choice. Quinidine sulfate is given in doses of 0.2 Gm. every two hours for five to seven doses daily, increasing the basic dose by 0.1-0.2 Gm. every day and preferably not exceeding 0.6 Gm. as the individual dose.

Atrial Flutter. In the majority of cases the drug of choice is digitalis. The long-acting preparations such as digitalis leaf or digitoxin sometimes reduce the ventricular rate more efficiently than short-acting preparations¹³. Cedilanid may be used as outlined above or digitoxin may be given orally (intravenously in shock), 0.6 mg. initially, then 0.4 mg. every six hours to therapeutic effect, then maintenance dose of 0.05 to 0.2 mgm. daily. It is better to strive for adequate slowing of the ventricular rate whether flutter persists or whether it converts to fibrillation.

Atrial Fibrillation. Treatment is the same as for atrial tachycardia with intravenous digitalis to be given in the urgent situation or in the acute myocardial infarction with shock or congestive failure. Oral quinidine is preferred in myocardial infarction without shock or congestive failure, and likewise is the first choice in acute infections, such as pneumonia, and in hyperthyroidism.

The problem of whether to convert atrial fibrillation to sinus rhythm with quinidine is a different question and does not pertain significantly to the emergency type situation. The experience of Case 3 is a reminder that embolism is a danger in the fibrillating patient whether or not any attempt is being made to convert the rhythm.

Ventricular Tachycardia. It is somewhat more of an art and involves more mental gymnastics to decide about drugs in ventricular tachycardia, depending upon what facts can be obtained and what observations can be made in a short time.

If there is suggestion of digitalis toxicity in the picture and no problem of renal insufficiency, the drug of choice is potassium chloride^{14,15} and the method suggested by Bettinger and associates¹⁴ consists of the intravenous injection of 6 to 60 mEq. at a rate of 0.5 to 1.0 mEq. per minute. These investigators have reported favorable effects on supraventricular as well as ventricular tachycardia and in patients not receiving digitalis as well as in those receiving digitalis. Thus, even in cases of doubt as to the role of digitalis, this drug still seems a promising first choice.

If there is no obvious explanation for the ventricular tachycardia or if it complicates acute myocardial infarction, without severe shock or congestive failure, procaine amide is the drug of choice^{16,17}. In the situation that is critical, it would seem best to give the preparation intravenously to be certain of its effectiveness. This can be done well by starting an infusion of 5% glucose in water and then administering the Pronestyl slowly through the tubing at the rate of 100 mg. per minute and not exceeding 1.0 Gm. If there is no doubt concerning absorption, the drug should be given intramuscularly^{18,19} in an average dose of 1.0 Gm. with subsequent doses of 0.5 to 1.0 Gm. every one to six hours.

If there is definite congestive heart failure but no element of digitalis toxicity, in spite of the long-standing fear against it, the physician should administer digitalis rapidly to achieve effect, in the same manner as Cedilanid or digitoxin in atrial tachycardia. Gibson and Schemm²⁰, Hermann and Hejtmancik²¹, Scherf¹² and Enselberg¹³ all give us courage to overcome a long-standing concern in this situation.

If there is a history suggesting that the ventricular tachycardia followed as a complication to complete A-V block, then both procaine amide and quinidine should be avoided^{6,9,10}. Here, then, potassium chloride infusion, digitalis, especially if congestive failure is present, or Isuprel^{1,7,22} would be indicated. Isuprel would be given best by infusion as described below.

Complete AV Block. Whether this conduction disturbance constitutes the primary problem or whether it complicates myocardial infarction, it is imperative to produce a reasonable ventricular rate in place of any of the elements that might obtain, including the extremely slow ventricular rates, ventricular asystole, or runs of ventricular tachycardia or fibrillation. The drugs of choice today are isopropyl norepinephrine (Isuprel)^{1,7,22,23} and molar or half-molar sodium lactate²⁴. In critical situations Isuprel is best given as an intravenous infusion of 1 mg. in 200 cc. 5% glucose in water, to be given at the rate of 1 cc. or 5 mcg. per minute. Bellet and his associates²⁰ have reported a striking stimulation of ventricular rhythmicity by molar sodium lactate in patients with A-V block, using doses varying from 15 cc. of molar solution administered intravenously in one minute to a total of 960 cc. of molar and half-molar solution given over a period of five hours. The speed of injection depended upon the situation and the response obtained.

Summary

Many cardiac arrhythmias either produce very little trouble or cause relatively harmless, but distressing episodes. There are circumstances, however, in which an ectopic rhythm becomes the primary factor to produce a cardiovascular crisis, and other instances in which ectopic rhythms, which would otherwise not be too alarming, produce serious problems by complicating myocardial infarction, congestive heart failure, or cardiovascular therapy.

These rhythms include chiefly atrial tachycardia, atrial flutter, atrial fibrillation, ventricular tachycardia, and complete A-V block. Appropriate circumstances include elderly people with latent coronary insufficiency, individuals with known coronary insufficiency, and patients with other forms of organic heart disease. The clinical picture of such episodes may be that of chest pain with dyspnea, pallor, sweating, weakness, or collapse; shock; acute pulmonary edema; acute congestive heart failure; or Stokes-Adams episodes with fainting, loss of consciousness, or generalized convulsions.

After identification of the arrhythmia and assessment of its contribution to the picture, the practicing physician must have immediately in mind the initial treatment he will administer in a given situation. The preferred treatment for the various arrhythmias under different circumstances is outlined.

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Herpangina is a distinctive syndrome often prevalent during the summer months among the children. It was described many years ago by Zahorsky and in 1952 Heubner recovered Group A Coxsackie virus from a group of such patients. The onset is sudden with fever up to 105 F, sore throat, headache, and abdominal pain. The characteristic physical finding is one to a dozen small (1-5 mm in diameter) yellow, gray, or white discrete vesicular lesions located on moderately inflamed anterior pillars of the fauces and less commonly on the uvula and soft palate. These later form small ulcers each surrounded by a red aureole. The white blood count is normal or slightly elevated. The fever subsides in one to four days with recovery. No complications have been seen and treatment is symptomatic.

Richard G. Elliott, M.D.

Lexington

MANAGEMENT OF URINARY INFECTION

EDGAR BURNS, M.D.,* AND EDWARD H. RAY, JR., M.D.**

Infections of the urinary tract are of frequent occurrence in all age groups. They occur more often in adults than in children and females in both age groups are more frequently affected than males. Figures are usually confusing and rarely add to the value of clinical reports. On the other hand, reference to a series of personal cases for the purpose of discussion may be justified. In a review of 4,325 records of patients seen at the Ochsner Clinic from Jan. 1, 1942 to Aug. 1, 1956 with a final diagnosis of urinary infection, 4,088 were adults and 237 children. In the adult group the females outnumbered the males by slightly less than three to one, and the lower urinary tract was involved two and one-half times as often as the upper urinary tract in females and one and one-half times as often in males. Approximately the same ratios prevailed in children, regarding both total incidence as well as lower to upper urinary tract involvement in both sexes. This is not new information but simply a reemphasis of the factors that are to be considered in trying to determine the primary focus of the infection in the management of the individual problems. It is recognized that females are more prone to the development of urinary infections than males because of the relationship of the lower urinary tract to the genital tract.¹

A detailed discussion of all etiologic factors involved in the occurrence of urinary infections is not indicated here. It is sufficient to say that consideration should always be given to conditions in the urinary tract that might contribute to the cause, recurrence or persistence of the infection as well as to distant foci, such as teeth and the various parts of the upper respiratory tract.

Diagnosis

The efficiency of the currently available urinary antiseptics has greatly simplified management of urinary infections but these agents have not lessened the physician's responsibility for meticulous attention to basic fundamentals.

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**From the Department of Urology, Ochsner Clinic, New Orleans.*

***Senior Resident in Urology, Tulane University Service, Charity Hospital in New Orleans.*

Of importance among these is a carefully obtained history, physical examination with emphasis upon findings that may be related to the urinary tract, and special bacteriologic and urologic studies as individually indicated.

Almost every patient with infected urine will have symptoms that suggest their origin in the urinary tract. Most of these have frequent urination regardless of the level of the urinary tract that may be involved. Frequency may be associated with burning, urgency and tenesmus, suprapubic discomfort and lumbosacral backache. Gross hematuria is common and is more liable to occur during the acute phase than in infections of long standing. Discomfort in one or both flanks is suggestive of renal involvement but chills and fever occur only when the kidneys have become infected. Correct evaluation of symptoms will suggest with a fair degree of accuracy the part of the urinary tract that may be involved. In the majority of cases correlation of the patient's symptoms with results of a careful physical examination will indicate the extent to which detailed urologic investigation should be carried out as a part of the initial study.

The diagnosis of urinary infections would appear to be simple and easy to accomplish but this has not been a uniform experience. Incomplete and inaccurate diagnostic studies account for the majority of difficulties encountered in successful management. The diagnostic procedures, therefore, center around accurate study of the urine, estimation of renal function, studies of the urinary tract to rule out possible complicating lesions and appropriate investigation to determine the presence of foci of infection outside the urinary tract that constitute an etiologic factor.

To determine the presence of pus in the urine is simple but errors in collecting and examining the specimen give rise to both false positive and false negative reports. The most common origin of false positive reports is the manner in which the specimen is collected. The voided urine from the female always contains bacteria and may contain pus in the secretions from the cervix, vagina and adjacent glands.^{2,3} For that reason only the catheterized specimen from the female is reliable for study. This is true of female children as well as adults. In-

fection in the genital organs in the male may account for pus found in the first portion of a voided specimen and for that reason only mid-stream specimens or a second glass portion is acceptable for examination.^{4,5} False negative reports may also originate from delay in examination of the specimen even though it has been correctly collected. If the specimen is allowed to stand at room temperature for more than an hour after it has been collected, it largely loses its diagnostic value. Chemical changes produce disintegration of the cellular elements and this change takes place more rapidly if the urine is alkaline.

The type of infection in the urine may be roughly determined by a properly prepared stained smear of a sediment from a centrifuged specimen. A methylene blue stain will determine whether the infection is coccal or bacillary and Gram's stain will differentiate between gram-positive and gram-negative bacteria.⁶ In the majority of cases more complicated bacteriologic studies are not necessary. Culture of the urine should never be used as the only procedure to determine whether or not the urine is infected. False positive results that originate from contamination are too numerous to be compatible with good practice. Cultures should be used only to identify the organism that can be found on the stained slide and are indicated only in patients who fail to show a satisfactory response to treatment. Urine smears that show numerous pus cells without organisms should be studied for the possible presence of acid fast organisms. The so-called amicrobic pyuria may give much the same picture. On the other hand, a high powered lens will usually show fine organisms in this type of infection.

Renal Function

The effectiveness of the majority of drugs used in the treatment of urinary infections is dependent on their elimination by the kidneys. Some type of estimation of renal function, therefore, constitutes a part of the initial examination before treatment is started. The phenolsulfonphthalein test is a simple and reliable test that can be performed in the average physician's office. A specific gravity of 1.024 or above after the patient has been dehydrated for twelve or more hours, or a random specimen with a specific gravity of 1.020 or above, in the absence of glycosuria, may be accepted

as indicating relatively normal renal function. The importance of relatively normal renal function is two-fold. First, in the presence of reduced function not enough of the drug will be concentrated in the urine to be effective against the infection, and secondly, retention of the drug in the system will increase the incidence and severity of toxic reactions. With the information that infection is present and the knowledge as to the status of renal function, treatment may be started in the majority of cases without more detailed urologic or bacteriologic investigation.

Selection of Drugs

With the great array of drugs currently available there is a tendency to use those that have been more recently developed to the exclusion of the older drugs that have proved to be both effective and nontoxic.

Mandelic acid is effective against the majority of bacillary infections of the urinary tract associated with acid urine. It is most effective if the pH of the urine is 5.5 or below. The desired degree of acidity may be obtained by the concurrent administration of salol coated ammonium chloride tablets or one of the other acid forming drugs. Mandelic acid may be administered in the form of a syrup, elixir or tablet. The period of administration should not exceed ten to twelve days. If perceptible improvement is not shown in that period, another drug should be substituted. Mandelic acid is effective in the treatment of streptococcus fecalis infections but is not effective against the ordinary types of coccal infections.^{7,8}

The most widely used sulfonamide preparation at the present time is Gantrisin®. It is well tolerated by the majority of patients, both young and old, and has a low incidence of toxic reaction. It is effective against the majority of gram-negative bacilli that invade the urinary tract and the gram-positive cocci with the exception of streptococcus fecalis. It is effective in the presence of both acid and alkaline urine and can be used in the treatment of both acute and chronic infections. Although toxic reactions from Gantrisin are neither common nor severe, it is perhaps better to keep the urine alkaline during the period of administration.

Furadantin® is a relatively new drug and has proved to be a broad spectrum urinary anti-septic. It is effective against the majority of

bacillary infections, especially bacillus proteus, and may be of value in the treatment of pseudomonas infections. Toxic reactions are mild and consist chiefly of nausea, which is largely prevented if the drug is taken with food. The usual dosage is 100 mg. four times daily for five to seven days.

Aureomycin®, Terramycin® and Achro-mycin® may be considered together since they are effective against approximately the same bacteria and have much the same toxic reactions. The most common toxic reaction is irritation of the gastrointestinal tract, which may extend all the way from the mouth to the anal margin. Use of these drugs in postoperative cases may be more dangerous than beneficial unless wisely administered and the effects carefully observed. They have a tendency to eradicate the common inhabitants of the bowel and predispose to severe staphylococcal pseudomembranous colitis and staphylococcal bacteremia. This is a severe and fulminating infection and the organism is notoriously resistant to most of the drugs. It may be controlled by one of the newer drugs, erythromycin. Such cases emphasize the importance of having a definite scientific reason for administration of drugs.

Chloromycetin® is perhaps one of the most effective drugs in the treatment of urinary infections. Early reports in the literature, however, regarding severe toxic reactions have somewhat curtailed its use. On the other hand, if one reviews the toxic reactions from the other drugs, it is perhaps no more dangerous than any of the others. We have made liberal use of Chloromycetin and have encountered no reactions of importance. In a few critically ill patients from blood stream infection it has apparently been a life-saving measure. In the use of Chloromycetin, as in all the other drugs that possess toxic reactions, it should be remembered that intelligent administration is one of the basic principles of medical practice.

Erythromycin is a new and relatively non-toxic urinary antiseptic. Its use is limited, however, to infections due to gram-positive organisms.

Sensitivity Tests

In the use of the following group of drugs, because of the limited number of bacteria that they affect on the one hand and the possible toxic reactions on the other, detailed bacteriologic studies with sensitivity tests should be

carried out, in order that they may be used only when they appear specifically indicated.

Penicillin is not an appropriate drug to use in the treatment of the usual bacteria that invade the urinary tract. It may be of value in the treatment of acute urinary infection due to gram-positive cocci that have been shown by laboratory tests to be sensitive to penicillin. It is probably the most misused of all the currently available drugs.

Streptomycin is effective against many of the strains of colon bacilli that are found in the urinary tract. It may be of value in the treatment of aerobacter aerogenes pyocyaneus and proteus infections but its effectiveness should be established by laboratory tests before it is administered. There are two types of toxic reactions to streptomycin. Mild and unimportant reactions are numbness and flushing of the face and nausea after the injection. These promptly disappear after use of the drug is stopped. More serious reactions are tinnitus, vertigo and impaired hearing, which may persist for months after the treatment is discontinued. It requires intramuscular injection and therefore its use is confined chiefly to hospitalized patients. The prolonged use of streptomycin in children should be confined to those cases in which it is the only effective drug. Total permanent deafness has resulted from its use.

Polymyxin is another of the relatively new drugs that has been highly efficient in the treatment of pseudomonas infection. It is both nephrotoxic and neurotoxic. It should not be used except on the basis of cultures and sensitivity tests and only then if the patient is seriously ill and other drugs are not effective. The patient must be carefully observed for signs of reduced renal function as well as those of irritability of the nervous system.

The synergistic effect of multiple drug therapy has been established. Not infrequently a combination of two or three of these drugs has been found to sterilize urine that was not affected by either of the preparations alone. In the majority of uncomplicated urinary infections Gantrisin, mandelic acid, Furadantin and Chloromycetin will be drugs most utilized.

Urinary Tract Complications

A detailed study of the urinary tract is not indicated in the majority of patients with infected urine. On the other hand, persistent or

recurrent infections may be the result of such complications as stones, tumor, or some type of obstructive lesion in the urinary tract. Foci of infection outside the urinary tract should be eliminated. Once the complicating factors have been removed the infection should respond to treatment in the same manner as do uncomplicated infections. In the case of persistent infections without complications detailed bacteriologic studies are required to determine the specific organism present and the drug to which it may be expected to respond.

Summary

Urinary infections occur commonly in patients of all ages. They affect adults more often than children and females more often than males. Of basic importance in the management of these cases is a carefully obtained history, meticulously performed physical examination and special bacteriologic and urologic studies as individually indicated.

Most patients will complain of frequent urination, which may be associated with burn-

ing, urgency, tenesmus, suprapubic discomfort and lumbosacral backache. Gross hematuria commonly occurs during the acute phase. Renal involvement is indicated by pain in the flanks and chills and fever.

The diagnosis is not difficult if accurate diagnostic studies are performed. These include accurate study of the urine, estimation of renal function, studies of the urinary tract to rule out possible complicating lesions and appropriate investigation to determine the presence of foci of infection outside the urinary tract that may be responsible.

The efficiency of the great array of urinary antiseptics currently available has greatly simplified management of urinary infections. However, the present tendency to rely solely on the recently developed preparations to the exclusion of older drugs that have proved safe and effective is to be deplored. Selection of the drug to be used will depend on the type of infection. Antiseptics that have proved effective are mandelic acid, Gantrisin, Aureomycin, Terramycin, Achromycin, Chloromycetin, erythromycin, streptomycin and polymyxin.

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DIET, OBESITY AND HEART DISEASE*

ROBERT C. BERSON, M.D.

Birmingham, Alabama

I PROPOSE to review some of the recent advances of knowledge concerning the relation of diet and obesity to the development of atherosclerosis. There is a great deal of investigative activity in this field at the present time, and much interest in applying the knowledge gained to the management of specific patients.

At the outset I would like to remind you that there are two major varieties of sclerosis of the arteries that are quite different and have very different clinical significance. Mönkeberg's sclerosis of the arteries of the extremities is of almost universal occurrence after the age of 30. It consists of fraying and fragmentation of the elastic lamellae in the media of the arterial wall. This, in turn, leads to thickening of the media so that the arteries become more readily palpable. This condition is essentially benign and may occur with or without atherosclerosis. On the other hand atherosclerosis involves principally the intima, although the elastic layer may be involved as well, and may proceed to a fatal issue through coronary occlusion or cerebral hemorrhage due to the location of very small lesions at vulnerable points. My remarks will be limited to atherosclerosis since this is the lesion among the arterioscleroses overwhelmingly responsible for morbidity and mortality in man.

A United States government survey showed that in 1950 almost half of the deaths from cardiovascular disease could be attributed to atherosclerosis. Other surveys have shown that physicians have a notably higher incidence of coronary atherosclerosis than the general population, so all of us should have a lively interest in the development of knowledge concerning what William Dock has referred to as "The peculiar susceptibility of a few tenths of a gram of coronary intima to the development of atherosclerosis."

Anatomical Studies

Some knowledge has been gained along lines quite different from the study of diet and obesity. The first of these is the relation of the oc-

currence of atherosclerotic lesions in the blood supply of the arterial wall. Winternitz and his associates in 1938 studied fresh specimens of blood vessels supplying the walls of coronary arteries in various animal species and drew the conclusion that the distribution and extent of vascularity are related to both age and disease. They also commonly found hemorrhages in the arterial walls at the elective sites of atheroma and the sites of origin of vasa in the normal arteries of man and many animals. More recently Schlichter and Harris and O'Neal and Woerner have demonstrated a correlation between vascularity of the aorta and varying susceptibility to experimental or spontaneous atherosclerosis in different species, and have proposed the hypothesis that arterial lesions may result from conditions increasing the demand of the arterial wall for oxygen without proportional increase in the supply. This is an interesting line of approach but, as Altschul pointed out, it merely shifts the problem of etiology from the larger to the small vessels.

The second line of promise is that histological and pathological studies of human coronary arteries, using the electron microscope and other means have shown that the earliest lesions of atherosclerosis are characterized by accumulation of a mucoid substance in the intima, increase in connective tissue cells, deposits of collagen and elastic tissue and only advanced lesions are characterized by lipid deposition.

And there is evidence that hormonal influences, lipotropic factors and the diabetic state play an important role in the relation of cholesterol to atherosclerosis.

Studies of Cholesterol

However, ever since Anitschkow demonstrated that atheromatous plaques contained large amounts of cholesterol, interest in the relation of cholesterol to the whole process has been marked and growing. Anitschkow's observations have been confirmed many times by many workers. In many, but not all, series of cases with marked atherosclerosis a high concentration of cholesterol in the serum has been observed. And many series of patients with the diabetic state have been found to have both a

*Read before the Fayette County Medical Society, May 15, 1956.

high incidence of atherosclerosis and high concentrations of cholesterol in the serum.

The experimental production of atherosclerosis in chicks and rabbits by feeding large amounts of cholesterol and in many other species by a combination of thiouracil or removal of the thyroid with high cholesterol diets, have greatly increased the interest in this field.

This line of reasoning and investigation has led to efforts to apply it to the management of patients by diets low in cholesterol, by the administration of lipotropic agents such as choline, and to marked interest in agents that will precipitate bile or break down cholesterol to insoluble fractions, and more recently, to a chemical that inhibits the absorption of cholesterol.

But there are difficulties. The spontaneous atherosclerosis that occurs rather rarely in dogs is much more similar, histologically, to the lesions found in man than that produced by thiouracil plus high cholesterol diet. These spontaneous lesions in dogs have been studied intensively and in them the early lesions show a mucoid substance containing no lipids and cholesterol only appears in relatively late lesions.

Cholesterol is only slightly soluble in water so the means by which it is transported in the serum and across the cell membrane into the cell are important. Cohn and his associates have shown that it is transported in the serum largely in the alpha and beta fractions of globulin where it exists in loose combination with protein molecules. Gofman has shown that when these fractions are separated by ultracentrifugation distinctions can be made between the flotation rates of these macromolecules. Gofman's series of cases with atherosclerosis showed relatively high concentrations of macromolecules with a certain range of flotation rates. However other series of normal individuals showed a considerable number with comparable concentrations of macromolecules with the same flotation rates. There is no clear evidence of how cholesterol might be detached from protein molecules in the alpha or beta globulin fraction and transported across the membrane of intimal cells to the cytoplasm of the cells.

The experimental atherosclerosis of rabbits and dogs is but a part of a general deposition of cholesterol in many tissues of the body far in excess of anything commonly found in man.

Atherosclerosis occurs in patients with the diabetic state far more frequently than high serum cholesterol, and diabetic retinitis, once thought to be a classic example of localized atherosclerosis has been shown by Friedenwald to be due to capillary fragility with exudation of material that does not contain cholesterol in significant amounts.

Diets low in cholesterol were soon criticized on the ground that Keys was able to show that as much as 200 mgm. of cholesterol per day are consumed in diets containing only ordinary amounts of lean meat and skimmed milk. And they were dealt an even more deadly intellectual blow when attention was called to the endogenous production of cholesterol.

Working with isotopic markers Bloch and his co-workers produced abundant indirect evidence that the carbon incorporated in the steroid nucleus of cholesterol is derived from acetic acid or closely related two carbon units. Lippman showed that these are two-carbon fragments attached as an acetyl group to coenzyme A and are the common currency of metabolic exchange, not dependent upon dietary fat but derived from carbohydrate, most amino acids, acetaldehyde and other sources. And, not long ago, Chaikoff demonstrated that fresh arterial tissue can synthesize cholesterol from isotope labeled acetic acid. Kellner has produced some evidence that as much as 1,500 to 2,000 mgm of cholesterol is synthesized daily by normal man.

So increasing knowledge has made it clear that the simple hypothesis of excess dietary cholesterol, excess serum cholesterol then deposition of cholesterol in the intima or arteries needs to be greatly amplified and made more complex. There is a high premium on knowledge of the detailed processes of synthesis and breakdown of cholesterol and the mechanism that controls the balance between these processes and maintains homeostasis in health.

Clinical Observations

Two clinical observations remain which have not been disproved but rather confirmed by additional series of cases. On the one hand obese people have a notably higher incidence of atherosclerosis than normal or undernourished people. For example Wilens, in studying 1300 autopsies at Bellevue, found advanced atherosclerosis ten times as common in the obese of each age group as in normal or undernourished individuals.

And, on the other hand, Bantu tribesmen who spend their lives on diets very low in fat and in whom obesity is a rarity, rarely show overt evidence of atherosclerosis. Steiner reported 100 autopsies on Okinawans, who live virtually without animal food products. Only seven showed minimal atherosclerosis of the aorta and there was no detectable coronary atherosclerosis. And in the post WW II period in Norway, Finland and Sweden there has been a rising incidence of atherosclerosis correlated with increasing consumption of cholesterol, fat and calories.

These clinical observations do not warrant the assumption that the mechanism of atherogenesis is simple or understood. They do, I think, make it reasonable to think that a diet designed to prevent or remove obesity and achieve normal or undernutrition is a step in the right direction. Such a diet must be severely restricted in total calories in relation to the energy expenditure of the individual, as well as

avoiding an excess of cholesterol or fat, and it should include supplemental vitamins, particularly of the Vitamin B group, because of the fact that deficiency of some of this group makes experimental atherosclerosis more pronounced.

How much such restricted diets have to offer patients who already have clear evidence of atherosclerosis, or those of us who know we are in the vulnerable group, remains to be seen. A number of workers have begun well controlled series of cases to throw light on this point (and I might add that my own competence and work is at this rather than the molecular level) but the accumulation of many cases over a number of years will be necessary for any firm conclusions. In the meantime we should be very guarded in our optimism because of the possibility that the crucial damage to those few precious grams of intima was done long before the dietary regime and that all the rest is epilogue.

Epistaxis from Kesselbachs Area or any other accessible point on the nasal septum or turbinates can be controlled in almost every instance by simply injecting 5—lcc of Synasol under the mucous membrane 5-6 mm from the bleeding point. A small cotton pack pressed snugly over the previous bleeding point for 24 hours insures complete hemostasis.

Alvin C. Poweleit, M.D.

PITFALLS OF PEDIATRIC ANESTHESIA*

C. R. STEPHEN, M.D.**

Durham, North Carolina

DRIVING along a secondary road in a large modern car is not an unpleasant experience, but in a small Crosley or Austin every bump in the road jars the occupants and each curve produces a reactive tensing of the muscles. In the smaller, lighter car, unless the driver is careful in his actions and moderate in his decisions, the journey is infinitely more dangerous. With a degree of license, one may liken the administration of anesthesia in the adult and child to that of driving the large and small vehicles.

In the infant and child the road between unconsciousness and death is beset with more potential hazards than are encountered in the adult. Evidence to support this contention is found in different analyses of anesthetic deaths and so-called cardiac arrests (1) (2), where it is shown that mortalities in the first decade are more numerous than in any other age group. Some of the particular dangers associated with pediatric anesthesia will be discussed.

Hypoxia

It has been said that the three principal causes of death during anesthesia in children are 1) hypoxia, 2) hypoxia, 3) hypoxia, in descending order of importance (3). The recognition of oxygen lack is of paramount consideration, and sometimes extremely difficult. From the physiological aspect, it is important to remember two facts. First, the only reliable clinical sign of hypoxia, cyanosis, does not appear until at least five grams of reduced hemoglobin are presented in the arterial blood. Therefore cyanosis will not appear until the arterial oxygen saturation has been reduced to 75 or 70 per cent. Clinical evidence to indicate moderate degrees of hypoxia is lacking. Secondly, the functional residual air, that amount left in the lungs after a normal expiration, is relatively much smaller in the child than in the adult. The functional residual air in the adult will supply oxygen to the arterial blood for two or three minutes, but in the child this reserve oxy-

gen is utilized in 30 to 45 seconds. In other words, the margin of oxygen reserve in the child is very small.

During anesthesia oxygen lack to the tissues may be produced in several manners:

1) The time-honored administration of ethyl ether by the open drop technique is considered to be one of the safest methods available. Yet this technique may be associated with hypoxia. In order to attain surgical anesthesia ether vapor must be inhaled in a concentration of ten to fourteen volumes per cent. At the same time, a certain dead space is present under the ether mask, so that each inspiration of the patient consists to some extent of the previous expiration. Expired air contains approximately sixteen per cent oxygen and four per cent carbon dioxide. If one considers the dilution factor of the ether vapor and the expired air, it is seen that the patient will not be inhaling 20 per cent oxygen, but perhaps only 16 or 17 per cent. Over a period of time this technique can produce a significant degree of hypoxia (4). This factor can be corrected easily by flowing oxygen under the mask at a rate of 500 to 1000 cc. per minute.

2) Upper respiratory obstruction is precipitated easily in children with the abolition of muscle tone associated with light as well as deep anesthesia. Several factors may be incriminated. Many children have large tonsils and adenoids and these structures, associated with the tongue falling back into the pharynx, may produce almost total obstruction. In light anesthesia oral airways cannot be tolerated and often make the situation worse by inducing a spasm of the vocal cords. Holding up the jaw in conventional fashion may abolish the obstruction due to the tongue, but it also closes the mouth, so that obstruction still remains in those children who have large adenoids and are essentially mouth-breathers. In such patients two measures may help. The jaw may be held in such a way that the mouth is kept open until such time as an airway can be inserted safely. Alternatively, a nasopharyngeal tube may be slid gently through the nose into the pharynx, by-passing the adenoid tissue. These tubes may be inserted in light planes of anesthesia. The

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**Division of Anesthesia, Duke University Hospital and School of Medicine, Durham, North Carolina.

attendant risk is the possibility of initiating adenoidal bleeding unless extreme gentleness is exercised.

Obstruction to free exchange of air may also occur easily at the level of the vocal cords. The larynx of infants and children is of relatively narrow diameter and may be obstructed easily under anesthesia. Too rapid administration of irritant ether vapor may produce a high-pitched crowing sound known as stridor. This sound is the result of rapid passage of gases through a narrowed orifice. Mucus or phlegm present in the throat may lodge against the larynx and either mechanically narrow the opening or instigate reflex adduction of the cords. Excessive movement of the head during induction or too early insertion of an oral airway may induce laryngospasm. The laryngeal reflexes are not obtunded until the lower part of the second plane of the third stage of anesthesia is reached.

Obstructive calamity occurs when massive regurgitation of stomach contents is associated with aspiration into the tracheobronchial tree. In traumatic cases digestion usually stops at the time of injury. If a child has eaten just prior to injury, or following it, the stomach must be considered to be full, even though several hours elapse before anesthesia is begun. In such patients vomiting may be produced prior to anesthesia, careful induction with open drop ether, followed by endotracheal intubation, may be successful, or regional methods of analgesia can be employed. Suction and Trendelenburg position must be immediately available for these cases. Safe anesthetization taxes the ingenuity of the most expert (5).

Upper respiratory obstruction, and therefore hypoxia, is recognized with certainty by the inability of the thoracic cage to expand smoothly and easily during inspiration. Indrawing of the suprasternal and supraclavicular notches, rocking-boat movements of the chest and diaphragm, and jerky respirations denote respiratory obstruction in light planes of anesthesia. Instant recognition of such signs can be noted only when the thorax and abdomen of the patient are uncovered completely.

3) Inadequate tidal volumes, or a depth of respiration which is less than when the patient is awake, can lead in a subtle manner to hypoxia. Effective alveolar ventilation, and hence sufficient supply of oxygen to, and elimination of carbon dioxide from, the blood stream is possible only when respiratory exchange is ade-

quate. In children this factor is of special importance because of the relatively small residual air space in the lungs. As noted above, upper respiratory obstruction reduces ventilation. Many of the drugs employed in anesthesia also reduce tidal volume. Ultra-short-acting barbiturates, cyclopropane, narcotics, muscle relaxants all reduce tidal exchange either by central or peripheral action. Their employment is safe only when the anesthesiologist is prepared and able to assist the respirations of the patient to preserve normal ventilation. Ethyl ether has achieved its reputation of safety in pediatric practice to a considerable extent because it does not depress respirations in surgical planes of anesthesia.

4) Anemic anoxia is a factor which sometimes is not appreciated fully in pediatric surgery. Almost all the oxygen in the blood stream is carried to the tissues in combination with hemoglobin. If the total amount of hemoglobin is deficient, oxygen supply to vital organs will be reduced, no matter how well the lungs may be ventilated. Recent evidence suggests that many pediatric fatalities are associated with a pre-existing anemia in the child (6). Elective operations should be postponed until normal hemoglobin values are obtained. When surgery is necessary, transfusions preoperatively will help to correct the condition. During operation, blood loss, if at all extensive, should be replaced on the table. A loss of 30 cc. of blood in the infant of six months is equivalent to a loss of 500 cc. in the adult.

Convulsions

When convulsions occur in children under anesthesia, the etiological factors may be several, and it is difficult in many instances to single out any one cause. First, there may be a so-called constitutional element involved. The pale, blond, rather plump child appears to be prone to have increased cerebral irritability. It is this type of patient who in times past was said to tolerate anesthesia poorly because of extraordinary thymicolymphatic involvement. Now it is recognized that such patients are more sensitive than others to anesthetic drugs. Hypoxia, respiratory or metabolic acidosis, dehydration, a high fever associated with a high external temperature which prevents adequate heat loss, all may contribute to the development of convulsions. (7).

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Divinyl ether (Vinethene®) and ethyl ether are the anesthetic drugs most frequently associated with convulsions. Convulsive movements occur during or just after induction with divinyl ether in about one out of every 200 children. The episodes seen in relation to this drug are seldom serious and almost invariably cease spontaneously if the anesthetic is withdrawn and oxygen administered to the patient (8). As a rule, spontaneous respirations do not stop and anesthesia can be continued as soon as the movements cease.

Convulsions seen with ethyl ether occur usually after an hour or more of anesthesia and in patients who show predisposing factors as noted above. These episodes are serious and demand prompt and vigorous attention. Such patients may develop cardiac arrest rapidly secondary to the anoxia associated with the convulsions. In these instances forewarned is forearmed and if an endotracheal tube is already present and an intravenous solution is maintaining a vein open, oxygenation by positive pressure and control of the convulsions with an intravenous barbiturate are accomplished readily. In the absence of these safeguards treatment is more difficult to instigate. When it is believed that convulsions may develop in a patient, it is wise to avoid the use of ethyl ether for anesthesia. If this drug is employed, insure a mechanically patent airway and an open vein as soon as possible.

Hyperthermia

In infants and children over six months of age, it is common for the body temperature to increase during surgical operations. This elevation may be due in part to the pathology existing in the child, to the anesthetic drugs and techniques employed, or to the heavy draping of the patient preventing normal heat loss. Whatever the cause, the rise in body temperature increases metabolism and oxygen utilization, adds to the risk of convulsions and complicates the postoperative course of the patient. With the recent increase in knowledge and experience relating to hypothermia, it has become evident that measures taken to lower body temperature may be advantageous to the patient. When children come to the operating room with fever, or when a long major operative procedure is contemplated in patients over six months of age, it is our belief that the place-

ment of several ice-bags about the body acts in a beneficial manner (9). Elevations in body temperature will be prevented and in some patients the temperature will fall. Unless temperatures fall below 34°C (93.2°F), no special precautions are necessary and the reduced metabolism is of benefit to the patient. Body temperature can be monitored easily with a rectal thermometer.

Overdosage of Drugs

Because of the small size of infants and children equilibrium of anesthetic drug concentrations between lungs, blood stream and body tissues is achieved rather quickly. For this reason it may be difficult to maintain an even plane of anesthesia. Children become too lightly anesthetized very easily and by the same token may become over-anesthetized rapidly. On the one hand reflex laryngospasm may develop suddenly, or in the space of a few breaths marked respiratory depression and even apnea may develop. Under ether anesthesia deep planes of narcosis are always associated with paralysis of intercostal muscles and a jerky diaphragmatic type of respiration, a type of respiration which may resemble upper respiratory obstruction. Under anesthesia employing Pentothal® sodium or Surital® sodium, both intercostal and diaphragmatic action become depressed and respiratory exchange becomes shallower as narcosis deepens. Muscle relaxant drugs should not be used in children unless an endotracheal tube is present and the anesthesiologist is experienced in assisting the patient's respirations or breathing entirely for him. Actually the muscles of the child relax easily and there are few operations where muscle relaxant drugs are indicated specifically.

As a general rule, light planes of narcosis suffice for pediatric surgery. One should aim to maintain anesthesia in a plane that permits adequate function of the intercostal muscles. The narcotic level should be deepened only when necessary and for as short a time as possible. In this way danger from overdosage of drugs will be lessened.

Endotracheal Intubation

The utilization of endotracheal tubes in children is still questioned by some physicians. The advantages of a patent airway under the anesthesiologist's control, especially in head and

neck operations, is acknowledged, but the finger is pointed to the occasional patients who develop laryngeal edema and obstruction in the postoperative period. It is believed that this pitfall of pediatric anesthesia is due to trauma associated with intubation or to bucking on the tube after insertion, and can be avoided. First, gentle, atraumatic, dextrous placement of the tube is necessary. Often an attempt is made to intubate the trachea in too light a plane of anesthesia. Atraumatic exposure of the larynx and insertion of the tube without the patient bucking on it requires a deeper plane of anesthesia than is usually necessary for the remainder of the operation. Third plane third stage ether anesthesia is required for smooth intubation. Once the tube is in place, the child may be carried in lighter planes without fear of laryngospasm and its associated hypoxia.

Diligence is required also at the time of extubation. Bucking on the tube or laryngospasm subsequent to its removal can be minimized by maintaining the patient in first plane third stage anesthesia and withdrawing the tube rapidly during the expiratory phase of respiration.

Anesthetic Techniques

The simpler the apparatus used to convey drugs to patients, the less likely is the possibility of mechanical complications during administration. In children several factors are important in the technique employed. Because of the small respiratory exchange, or tidal volume, the apparatus employed should have a minimum of mechanical dead space. Face-masks should be small and rebreathing of expired air reduced as much as possible. Due to their relatively weak respiratory musculature, the resistance against which children must either breathe in or breathe out should be small. The open drop technique embodies little resistance, whereas most modern gas machines, having been made primarily for adults, incorporate considerable resistance for children. Thirdly, a technique should be chosen in which there is little likelihood of carbon dioxide accumulating.

Probably complete reliance should not be placed on chemical absorbers as found on gas machines. Finally, a technique which allows minute to minute change in the depth of anesthesia is preferable in children.

The above notations indicate perhaps why the open drop technique, properly performed, is still the first choice of many anesthesiologists in pediatric work. The use of the closed circle absorption technique, employing standard gas machines, is fatiguing and unphysiological in children under seven years of age. Semi-open or non-rebreathing techniques, employing high flows of gases, are believed more likely to avoid pitfalls of administration in pediatric practice (10).

Conclusion

Perhaps what is required as much as anything in pediatric anesthesia is a middle of the road course. This optimum is achieved not by the spectacular or novel, but rather by the proper practice of physiologically sound, conservative techniques. Constant vigilance and carefulness must be the watchwords of safe anesthesia. The road which one travels in pediatric narcosis is narrow as well as bumpy. Deviation from the center may land one in the ditch, from which extrication may be difficult. The best practitioner is the one who, by proper prophylactic measures, can stay out of the ditch.

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OBSERVATIONS ON THE GENESIS OF PEPTIC ULCER*

CHARLES BARON, M.D.

Covington

THE literature is replete with information and speculation on the genesis of peptic ulcer. Throughout most of it is a dearth of consideration on the aspect of constitutional or genetic factors.

Systemic stress during the alarm reaction produces acute gastrointestinal ulcers, as reported by Selye.¹ Stresses such as trauma, surgery, burns, infections, fatigue or emotional tension will produce an alarm reaction. Clinically these have been reported by Billroth, Curling, Cushing, Penner and Alexander. Recently Woldman² reviewed 943 consecutive necropsies and found 25 per cent of the total number had acute lesions in the upper intestinal tract. In these instances the stress happened to be a fatal illness, or fatal traumatic condition, with death occurring soon after the shock phase of the alarm reaction. His investigation showed a striking correlation between the severity of adrenal damage, as demonstrated by microscopic study, and the incidence of mucosal hemorrhages and acute ulceration of the upper gastrointestinal tract. From this he concludes that the adrenal gland may be a stress defense organ.

Constitutional Defect

In 1932 Margolis and Eisenstein³ made a study of human constitution, with twins as biologic controls. They stated, "The development of identical disease in each of two physically distinct individuals, derived from a single ovum points unmistakably to some common denominator. This factor we choose to call the factor of susceptibility. It really represents a defect in the constitutional structure in each of two individuals. Considering the many cases of mental disease, of diabetes, of blood dyscrasias, renal tuberculosis, cholelithiasis, bronchial asthma, arthritis, etc., observed in identical twins, one cannot escape the conclusion that in such twins the constitutional basis for the development of disease is a tangible factor. The frequent development of identical disease in identical twins at the same period of life and particularly at different periods of life, indicates

beyond the possibility of doubt that latent predisposition to a given disease lay in wait for these individuals, and depended only upon an adequate environmental stress to become apparent. Through a study of the history of these twins, the disease process is seen to be the result of some element in the environment, plus the necessary vulnerable spot in the individual. So regarded, disease is seen to be not a capricious sequence that must follow when an individual harboring a definite inborn error is placed in an environment containing many possible noxious elements." Davison⁴ states that an hereditary history of ulcers occurs in 23 per cent of pediatric patients with peptic ulcer and occurs in identical twins.

To labor the point of "constitutional structure defect" or "inborn error," let us turn for a moment to congenital anomalies. Potter⁵ states, "The two ultimate factors responsible for the condition of the individual at any given time, whether it be before birth or 80 years later, are heredity and environment. The effect of environment is directly proportional to age and the nearer the individual is to his beginning the greater the influence of heredity; the farther removed, the greater the effect of environment. The state of the zygote is largely dependent on heredity, but even here factors responsible for delayed fertilization, inhibition of proper movement down the Fallopian tube and abnormal chemical constituents in the surrounding fluid comprise environmental alterations that may modify its character or alter any of the succeeding stages of development. Although the hereditary units by which body patterns are elaborated do not change with age, the part heredity contributes to the existing state of an individual at any given time is inversely proportional to the length of time environmental factors have had an opportunity to exert an effect. Consequently the younger the individual for whom a cause of death or abnormality is sought, the greater the probability that heredity was responsible."

Identical anomalies of homologous twins have been the subject of numerous reports in the literature by Mitchell and Downing, Murray, Petschacher, Smith and Welz and Lieberman.

*This paper was read on Sept. 6, 1955 at Michigan State University before the American Society of Human Genetics.

Recently the author⁶ delivered two consecutive siblings with bilateral agenesis of the kidneys. Shortly thereafter a colleague had a patient with a diverticulum of the uterus, which became evident only when the patient went into labor. Thus in one instance there was an absence of organs, in the other instance there was a defect of an organ.

Localized Somatic Defects

To pinpoint the defects still further we can say that errors of somatic formations may occur in any structure, even in minute areas, especially the gut with which we are dealing. Muller and Heimberger, quoted by Hurst and Stewart⁷ examined fresh specimens of stomach with a capillary microscope immediately after partial gastrectomy for peptic ulcer. They found evidence of spasm and atony of the arterioles, capillaries and venules of the gastric mucosa. They intimated that similar vascular abnormalities could be demonstrated in the mucous membrane of the lips and in the skin of these patients. They assumed that the diathesis was the result of congenital or acquired disharmony of the structure and the function of the peripheral blood vessels. They referred to this as a vasoneurotic diathesis. Hurst and Stewart described a hypersthenic gastric diathesis and intimated that it is an in-born variation from the average normal which manifests itself in a shortened stomach accompanied by active peristalsis and rapid evacuation and in hyperchlorhydria with gastric hypersecretion. Although that condition is compatible with perfect functioning of the digestive

tract, they expressed belief that it is one of the essential predisposing factors in the production of duodenal ulcer. They stated that persons with long stomachs if exposed to the factors which incite ulceration are likely to have gastric ulcer rather than duodenal ulcer.

Given localized types of errors, cannot it be said that the noxious stresses mentioned in the first part of this paper may produce an ulcer in this given area. In one case mentioned by Potter,⁵ peritonitis following gastric rupture, the muscle coats became gradually thinner and disappeared at the margin of the tear in the stomach wall. This appeared to be a congenital defect of the musculature. The recent pediatric literature contains a number of cases of peptic ulcer in the newborn 24 hours to one week old. The structural changes, from an accepted histologic point of view, were well substantiated.

Conclusions

In peptic ulcer individuals, there is an anlage of sensitive tissue potential subject to physical neurogenic and psychologic stress. These stresses exert forces of destruction, that is, autonomic physiologic onslaughts of hyperactivity such as hypermotility, hypersecretion with increased pH and hyperemia, so that when the level of resistant threshold is reached beyond its genetic homeostatic stability, ulceration occurs. These stresses may be maximal from birth on but the kind of stresses change with the years. These stresses may be episodic and additive to provoke enough change in the homeostasis of the ulcer anlage to cause its breakdown.

Suicide and suicidal preoccupations are cardinal symptoms of depressions. We should always be on the alert for other symptoms of depressions such as insomnia, feelings of hopelessness and unworthiness, extreme body consciousness and tearful agitation. Depressions today are among our most treatable emotional illnesses. Let us recognize and treat them.



CASE DISCUSSIONS



THE WATERHOUSE-FRIDERICHSEN SYNDROME FAILURE OF HYDROCORTISONE THERAPY

Presentation

Charles R. Perry, M.D.: M.V.*, a 39-year-old housewife, was admitted to the Louisville General Hospital because of fever, purpura and disorientation. The patient was unable to relate her story and it was obtained from her husband.

At approximately 6:00 P.M. on September 30, 1956, the patient began to complain of chills, fever, malaise and myalgia. These symptoms increased and her oral temperature was found to be 105° at 5:00 A.M. on 10-1-56. By 10:00 A.M., a red, discrete, macular eruption appeared on the skin of the neck and measles was considered likely. However, the rash spread rapidly to involve the face, trunk and extremities and its color changed from red to purple. By 2:00 P.M. there was extensive involvement of the skin and the patient had become irrational. Shortly thereafter she was first seen by a physician who suspected meningococcemia. No therapy was given but arrangements were made for immediate hospitalization. The patient reached the hospital at 3:00 P.M. on 10-1-56 having been ill for approximately 21 hours.

Physical examination: T 103°; P-120, regular; R-36; BP60/40. Examination revealed a moderately obese, gravely ill woman. She was restless, overactive and completely disoriented. She would respond to various stimuli; questions attracted her attention periodically but she was unable to answer coherently. The livid purpura was remarkable; it was confluent over the face, neck, and extremities with somewhat less involvement of the trunk which showed discrete purpuric areas 3-30 mm. in diameter. Numerous petechiae were present in the conjunctival and buccal mucosa but there was no evidence of nasal or oropharyngeal hemorrhage. There was unequivocal cyanosis of the nail

beds. The neck was only slightly resistant to flexion. The chest was clear. Heart sounds were faint; no murmur was heard. The abdomen was slightly distended and the liver, spleen and kidneys were impalpable. Normal motion was exhibited in all extremities.

Laboratory data: Hb.—13.0 Gms; WBC: 13,000; Pmn. 76%; Lymph—17% Mono 7%. Platelets were present in normal numbers. 18 eosinophils per (mm.)³ by direct count.

NPN—56, serum bilirubin—0.5 mg per 100 ml. Carbon dioxide content—18, chloride—100, sodium—124, and potassium—3.3 meq/l.

A lumbar puncture revealed clear fluid under normal pressure; protein—44 mg per cent. No cells were present and no micro-organisms were found on Gram-stained smear. A culture was subsequently reported to show no growth as were three blood cultures, two of which were taken before the initiation of penicillin therapy. Attempts to demonstrate organisms in the petechiae were unsuccessful.

Hospital course: Oxygen was administered by intranasal catheter and was continued despite the fact that it produced no significant improvement or lessening of cyanosis. Intravenous hydrocortisone therapy was started (100 mg. of free hydrocortisone in 1000 ml. of 5% dextrose-saline) and another infusion of penicillin (15 million units of sodium penicillin-G in 1000 ml. of 5% dextrose-saline) was given simultaneously. After approximately three hours both infusions were completed and hydrocortisone therapy was continued. Because of the persistence of shock, intravenous norepinephrine was utilized but it produced no significant pressor response even when given at the rate of approximately 60 micrograms per minute.

Fever and circulatory failure continued despite therapy and by 11:45 P.M., 10-1-56, restlessness had subsided and the patient was unresponsive to all stimuli. At this time, edema

*(L.G.H. No. 293221)

of the face appeared to be increasing and intravenous therapy was interrupted. In addition to penicillin and norepinephrine, the patient had received approximately 175 mg. of hydrocortisone. Her condition changed relatively little and she expired on 10-2-56 at 7:45 A.M., after an illness of about 38 hours. The clinical diagnosis was fulminating meningococcemia with probable massive adrenal hemorrhage, (Waterhouse-Friderichsen syndrome).

Autopsy Findings

Nicholas E. Balmoria, M.D.: There are discrete and confluent maculopapular, dusky-red skin lesions. The entire body is involved, particularly the face and extremities. The conjunctiva and mucous membranes of the oral cavity contain petechia.

Both adrenal glands are enlarged and hemorrhagic. Together they weigh 28 gms. On sectioning no normal adrenal tissue is visible. There are ecchymotic areas over the surface of the bowel. The spleen and liver are both moderately enlarged but are not otherwise remarkable. The brain is congested. All other organs appear normal.

Discussion

Beverly T. Towery, M.D.: Although fulminating purpura with massive adrenal hemorrhage was recognized on admission, it could not be proved without autopsy confirmation. The following clinical features provided strong support for the diagnosis: (1) a fulminating febrile illness; (2) the abrupt appearance of purpura which spread rapidly and was soon followed by (3) vascular collapse, cyanosis and disorientation. On the basis of probability, it was assumed that the meningococcus was responsible. The normal spinal fluid by no means excluded such a diagnosis.⁹ There is no satisfactory explanation for the negative blood cultures although similar experience is not uncommon.⁸

High fever prior to the onset of purpura, its extreme degree without bleeding from the mouth or nose, and the presence of numerous platelets in the blood film were incompatible with a diagnosis of thrombocytopenic purpura. The presence of platelets made thrombotic thrombocytopenic unlikely. The patient had not received anticoagulants or other drugs and there was no known exposure to toxic agents. The

absence of cardiac murmur and the extreme purpura afforded strong evidence against bacterial endocarditis. The very brief illness; the distribution and early appearance of the hemorrhagic rash were inconsistent with a rickettsial infection.

Although fulminating purpura with massive adrenal hemorrhage was described by Voelcker in 1894 and Little in 1901, the syndrome is inseparably linked with the names of Waterhouse (1911) and Friderichsen (1918). Most authors agree with Aegerter¹ and Martland⁹ that the meningococcus is almost invariably the causative agent despite the fact that other pyogenic cocci have been identified occasionally. Consequently, the inclusive term acute fulminating meningococcemia is often employed²; it has the advantages of etiologic precision without the implication of adrenal hemorrhage inherent in the eponym. Nevertheless, "the Waterhouse-Friderichsen syndrome constitutes a useful clinicopathologic concept and it would be a pity to discard it."³

Clinically it is unique in that no other infection kills so constantly or so quickly. Consequently, the adrenals are often examined at autopsy and the syndrome clearly established. The striking appearance of massive bilateral adrenal hemorrhage led to the assumption that acute adrenocortical insufficiency was the direct cause of circulatory collapse and death. It was widely held that recovery did not occur; a fatal outcome was a cardinal feature of the syndrome in the eyes of most clinicians.

However, in 1940 Carey⁴ reported recovery from fulminating meningococcemic purpura and since that time, with the advent of sulfonamide therapy, a few similar cases have been observed. However, recovery was rare and such therapy was believed to be ineffectual because of acute adrenal failure. It was strongly inferred, therefore, that adequate adrenocortical substitution therapy would significantly lessen the mortality in the Waterhouse-Friderichsen syndrome. This assumption appears to have been justified by several recent reports^{10, 3, 13, 2} which emphasize the apparent effectiveness of cortisone therapy.

In spite of this evidence, there still remains considerable doubt as to the exact relationship between adrenal hemorrhage and death in the course of fulminating meningococcemia. The following observations emphasize the virulence

of overwhelming meningococemia and assign to adrenal hemorrhage a role of secondary importance in determining the fatal outcome: The complete clinical syndrome of Waterhouse and Friderichsen can occur without demonstrable adrenal hemorrhage at autopsy. Although "tubular degeneration" of the adrenal cortices is commonly found¹¹ this appears to be acceptable morphologic evidence of a normal response of the adrenal to intense ACTH stimulation. When one recalls the low potency of adrenocortical extracts and the relatively slow absorption of intramuscular cortisone it becomes apparent that many of the patients whose recovery was attributed to these agents actually received meager replacement therapy. Also, nor-epinephrine was more effective than adrenocortical extract in the treatment of the circulatory collapse of meningococemia with purpura.¹² Finally, the observations reported here strongly suggest that adrenal cortical insufficiency was not primarily responsible for the patient's death. The relatively low eosinophile count provided presumptive evidence of a normal adrenal response prior to hospitalization.^{5, 7} Even stronger evidence is provided by the complete failure of the patient to improve under intensive hydrocortisone therapy. Her unresponsiveness to nor-epinephrine served to emphasize the gravity of the infection and presumably was not related to adrenocortical status.

This appears to be the first reported example of the Waterhouse-Friderichsen syndrome treated with intravenous hydrocortisone and the complete absence of response has important implications regarding the relationship between adrenal hemorrhage and death. Although the dose of hydrocortisone may have been inadequate, it represents more intensive replacement therapy than has heretofore been reported in those patients who recovered. It is concluded, therefore, that acute adrenocortical insufficiency did not play a major role in the patient's death and we are inclined, to agree with Martland⁹ that, "Death is due more to overwhelming meningococemia than to acute insufficiency of the adrenal cortex." This does not mean that massive adrenal hemorrhage is unimportant; on the contrary, its presence amply attests to the devastating consequences of fulminating meningococemia. Together with purpura, cyanosis and circulatory collapse, it represents a common manifestation of an infection whose

virulence alone decides the fatal issue even before hemorrhagic manifestations appear.

Although hydrocortisone therapy was without apparent benefit in this patient, it is imperative that it be used in large doses as soon as the diagnosis of meningococcal purpura is suspected. Its early use in less severe cases may be attended with more success than was noted in this patient.

It should be noted that sulfadiazine is probably a more acceptable therapeutic agent than penicillin.¹⁴ However, the recent *in vitro* studies of Finland and Love⁶ suggest that large doses of penicillin, such as were employed here, are as effective as sulfadiazine in meningococcal infections. Since the meninges were not involved, diffusion of the drug into the subarachnoid space was not a crucial feature. The choice of antimicrobial agent had much less effect upon the outcome than the time which elapsed before any therapy was given.

An example of the Waterhouse-Friderichsen syndrome is reported. Although bilateral adrenal hemorrhages were found at autopsy, the failure to respond to intensive hydrocortisone therapy is regarded as presumptive evidence that the primary cause of death was the virulence of the infection rather than acute adrenocortical insufficiency. The direct eosinophile count was misleading in assessing adrenocortical status. Although we were unsuccessful in isolating the meningococcus from the blood, it is our belief that this was the responsible organism.

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SPECIAL ARTICLE

FROM ARTIFACT TO ATOM SMASH AND THOUGHTLESS THINKING*

GANT GAITHER, M.D.

Hopkinsville, Kentucky

Presidential Address

MY presidential address to this distinguished body, the House of Delegates, the general meeting of the Kentucky State Medical Association and her guests and



Dr. Gaither

visitors, has given me much concern. I have no great accomplishments during my tenure of office to which I may point with becoming pride.

Au contraire, I have had much controversy, much harassment, many misunderstandings and misadventures—really a hectic year.

My presidential address to this distinguished body, the House of Delegates, the general meeting of the Kentucky State Medical Association and her guests and visitors, has given me much concern. I have no great accomplishments during my tenure of office to which I may point with becoming pride.

Au contraire, I have had much controversy, much harassment, many misunderstandings and misadventures—really a hectic year.

You will surely not blame me then, if I take refuge in the political orator's daily subterfuge—change the subject here and now from the immediate and just past present to the running future which is even momentarily spreading before us.

Quickly, may I give you a glimpse of human adaptations, how they have come about, where they are leading us? We may discover in them whether we as physicians can find solutions ourselves to our most evident problems.

My story begins some ten years back, with finding in the basement of the antebellum home of the Jefferson family—two generations direct from Monticello to Kentucky—in Trigg County at Cadiz, its county seat, the Indian artifact I am now about to show you. Some years passed before I secured personal ownership of it but by persistence, I finally succeeded. This arti-

fact of Indian pottery was found in the 1830's in a dry creek bed in Trigg County by a farmer who brought it to Cadiz and traded it to the then Jefferson pater families. A study by the curator of the American Indian Institute gives the opinion that it is the handiwork of an Indian Mound Builder about 900 A.D. It probably represents a high point in Indian artisan skills in the manufacture of pottery.

The visual aid thrown upon the screen shows views of this Indian water cup or jar, taken from a number of different angles so that you see the inner thinking of our aboriginal American as he turned out his masterpiece. You will note the body of the woman, in kneeling posture, is used as the container, the opening being at the base of her neck. Clay was used to fashion this earliest American 'objet d'art'. The ceramist used a sharp instrument to carve from the yielding clay her head and face, the psyche knot of her hair. The front view shows face, neck, collar bones, breast bone, costal margins and of course, her breasts, past producers of milk for the papoose, but now relegated as bijoux of laggard potency.

The woman is on her knees, arms akimbo with the spinal column. This is well defined with its vertebral notches accurately disclosed.

After shaping the clay, the next step was to place sand within the water cavity and bury the artifact in a bath of this sand. Then it was heated to a high temperature for several hours, converting the raw clay to a finished and interesting piece of pottery—now here after centuries—in this room for our viewing and our thinking.

What shall we think? This—the hand of the Mound Builder artisan and ceramist was much like your hand today, except darker in color. It had four fingers and a thumb—the same phalanges and metacarpals—the same lumbricales and interossei, as well as flexors and extensors. These anatomic structures had not changed since the Cro Magnon, the Neanderthal, the Java man. But by now, 900 A.D., something within the brain and mind of the Indian gave him the vision to embellish, to

*Presented September 16, 1956 before the K.S.M.A. Annual Meeting.

beautify, to decorate his simple cup of pottery into a work of art. And this he did. Cro-Magnon could not do this. Imagination had come to Mound Builder through the ages, giving a new guidance to his anatomic hand.

At this late date, we who like creative work, we artisans of the human body, surely can relieve momentarily the uplift and sense of accomplishment that must have lightened the soul of this man as he removed the cup from its furnace, cooled and polished it for its first use. His fingers had carried out the vision of his mind. A great unfolding had taken place since man came from the oozy slime.

Those first cave-men, with bodies physically much the counterpart of ours even of today—heart, lungs, legs, arms, brain—all about the same, sought early guttural speech. First came nouns of one syllable, like tree, water, fish, milk, and later verbs like come, go, bring, take, and then hundreds of years later, adjectives—‘good fish’, ‘pretty girl’, ‘sweet cane.’ Finally, after a million years came the substantives, the abstract concepts like beauty and goodness. But no marvel of the growth of spoken words over these aeons equalled the mental upsurge when man first spoke and understood the word GOD,—Great Spirit, Manitou, Deus, Theos, Allah—over the entire globe on every continent, in every tribe the word was ultimately formed, but ages apart, in Mesopotamia, the Mediterranean basin, deep Egypt, far-off China, Mexico with their Quetzacuatl, North and South America.

This was mental evolution on the march—never in a hurry—always slow but certain.

As words multiplied all over, thought became the great new contribution of man’s physical inheritance. He learned to use these words to convey his mental pictures, ideas of beauty, of pain, remorse, of desire. We see this more clearly on the stage where the dramatist can play the human emotions before us. He can stir us with the magic of his own mind.

Cro Magnon could not do this. Mound Builder artisan could not do this. But Christopher Marlowe could. The closing years of the sixteenth century at either the Swan or the Globe Theatre in London saw his play of Doctor Faustus brought to life by the spoken part. Doctor Faustus, now sere with age, was tempted by Mephistopheles, tempted beyond resistance as he brings to Faustus from the Underworld shades, not Marguerite of Goethe’s



Indian Artifact found in Trigg County

later making, but the matchless Helen of Greece, wife of Menelaus and paramour of Trojan Paris, Prince of Ilium—seductive Helen of Troy!

The action and words now are what I wish to show you.

Faustus sees this beautiful woman, the glint of gold from her hair burnishing across his dazed eyes. He half rises from his study chair to gaze with rapture. Marlowe has him say,

“Was this the face that launched a thousand ships
And burned the topless towers of
Ilium?”

Then overcome, he goes to her, and
as he moves he pleads,

“Sweet Helen, make me immortal
with a kiss!”

As her lips meet his, his arms enfold her, body to body, and he cries in ecstasy.

“Thou dost suck my soul out, and there it lies.” He melts into love’s aftermath. As he looks upon her now with possessive desire, he cannot keep back,

“Ah, thou art fairer than the evening air,
Clad in the beauty of a thousand stars.”

Whence came those words? They were coined in the mind and brain of Kit Marlowe whose hand, like yours and mine and Cro Magnon

and Mound Builder, was now driven by impelling will to create emotions. He must, with Mound Builder have had the same feeling of superior creation as he saw the drama reborn in England for Shakespeare to perfect. He saw it not in pottery, but in the fluxing material of nebulous words, catching for slowly advancing human civilization the force of thought to control the world. And Marlowe's hand, forget not, had the same four fingers and a thumb. But his mind, driving that hand, powerful beyond belief and untrammelled by space, was contained and encompassed in the small brain-pan of the skull of man—a cubic inch content so tiny to hold all its great thoughts!

And now from 900 A.D. and 1564 A.D., see the 1956 model with steam heat and air conditioning. Spanning these four hundred years, the delving mind of man has sought to unravel the mysteries of the universe about us. Through this labyrinth had come the teaching of Lucretius in his *De Rerum Naturae*, pre-Socratic to him, and the theory of the uncuttable atom. Scientist after scientist made his contribution—Dalton, Newton, Mendlieff, Remsen, Edison—all of them and many more, until finally the bursting bulging mentality of Einstein brought us atomic fission.



Atomic Burst

Let us see here momentarily upon the screen, just to refresh us, the actual vision of what takes place when the uranium atom is fissioned. We can understand the explosive noise, the great blinding flashes of light, and the intense heat. Here upon the screen is its immediate aftermath in the shape of the now well known mushroom cloud.

Here they are, portents of a new age. We may well remember this morning. There are two kinds of mushrooms, the poisonous and the

edible. Whether we make this mushroom to be a poison to mankind or something that may rebound to his everlasting good is for us to determine. Here is unbelievable power uncovered by the hand of man, by the brain of man. Did I say 'by the hand of man'? Yes, the hand of Einstein writing hieroglyphic formulae in advance, the hands of helpers fashioning the bomb—thus far have we come with Cro Magnon's hand!

Pari passu has come the handmaiden of the physicochemical sciences, the healing art. What a panorama can quickly pass before our dreaming eyes, the incantations, the mumbo, the charms, bubbling cauldrons with file of fenny snake, the medicine man of the Mound Builder and his pow-wow. Anatomy, Vesalius, Rauwolfia, Jesuits Bark from Brazil, Laennec's stethoscope, the microscope, germs, Jenner, McDowell, insulin, pell-mell upon us—E.K.G's antitoxins, sulfanilamide, penicillin, homogenous bone transplants, bifurcating aortic arterial grafts, cardiac and lung surgery-biochemistry. So fast have they come, we ourselves stand aghast!!

But mark you, that same hand, with its four fingers and its thumb, is still the instrument of that burning ever-onward pressing human brain, mind, and soul, forever pushing us, pulling us, tugging at us.

Can we fail here today in this pulsing body of the Kentucky State Medical Association which I see and feel before me, can we fail to use this instrument and our intelligence to fashion for humanity the proper *artifact* of words and actions to meet the problems that now confront us—to continue unswervingly the search to lay bare the laws of health and bring them properly to the citizens of our Commonwealth. These are our sacred duties.

We shall lay them bare and available by research and study. This much is clear, for this has been the way of all our advance.

But what about making these laws available to the sick? Surely we will be within our province and sphere to evaluate our own position in the Kaleidoscope of the newly changing American picture of making medical service available to all. It is a challenging moment in modern medicine, this prepaid medical care and hospital care for millions of Americans!

How shall this implementation be met? The pattern is now ten years old with many alterations coming annually in Blue Cross, a God-

given accident to those of us who sought a way out of the terrible Rooseveltian threat of compulsory health insurance. Thank God for those Texas school teachers!

So now we come to the crux of this, my address, the injection of "third party purchase of medical service, the corporate practice of medicine" the welfare funds and allied fringe purchasers.

We came up with our own corporation, the Blue Shield, when it became apparent that groups of people wished to purchase prepaid, installment paid medical and surgical care. They wished to buy our wares, which we had previously only sold on a doctor-patient sales basis. But this is becoming out-moded—and fast. The vast demand for our services by prepayment and installment payment was beyond the dream of commercial agencies. But Blue Shield went boldly into the demand with Blue Cross and supplied it, selling our commodity and trying to unfold a reasonable price for it, as statistics became available to know what the experience would be. The purchasers liked it. They wanted it expanded to more and more coverage and from group form to individual purchaser. These demands we have been, slowly—too slowly some think—trying to meet. And now what happens. The commercial insurance carriers are in the field most actively, and have persuaded some of our own members these carriers ought not to be competed against by Blue Shield. God save the mark!

If Blue Shield loses its forward movement, if we ease out in favor of commercial carriers as a few thoughtless thinkers in our midst think we should, if this trend, now slow, should be accelerated, we will gradually lose that degree of free determination and free choice of physician which we now hold necessary for the best medical service—the keen edge of personal competition to keep each of us at his very best.

This loss is a threat when there is a third party as the purchaser for a large group wishing medical services and has only to deal with each of us as a petty impotent individual. We *must* have a sales agency to meet their purchasing agency on an equal and fair footing. This, our sales agency, already is a 'fait accompli' in our own Blue Shield. It badly needs to be standardized over the various states, to have increased the type and number of coverages to supply each buyer with what he wishes.

Our mind which has come down the ages

bearing the caduceus for its symbol, developing for the sick of this world the vast processes of recovery we now hold for them, can not long be confused by so simple an issue as this. We have the answer in our own corporation, to meet the challenge to us and the threat to us as individual physicians—the united strength of an expanding, militant, and powerful Blue Shield. The movement is still in its babyhood, just the flicker of the lash over Time's great eye.

We have here the God-given hand that has through eternity shaped the course of medicine, the mind to direct it to the formation and maintenance of our protective barrier. Let's have done with the thoughtless thinking that we should just practice medicine. We have to sell it also and always have, but now in advance and in bulk, and on the installment plan. Meet the demand with the agency we own and control and which is non-profit, a matter for purchasers to bear in mind constantly. Therefore, let us not be guilty of thoughtless thinking about our own Blue Shield.

It should be our pleasure and duty to bring to bear for Blue Shield every capacity for intelligent action that the centuries have given us. Keep it voluntary, and non-profit, no compulsion or interference. Surpluses shall be passed quickly to patient in lower cost or increased coverage and not to stockholders. Let it be the best plan a person can have, nationwide, free for all ethical and qualified physicians to work under. If we do this, it will not only be our needed shield, but our buckler also.

Let our twentieth century minds have done with thoughtless thinking about our business agent!

With this problem solved and out of the way in the next few years, we may turn our Cro Magnon hand, our Mound Builder hand, the hand of Christopher Marlowe, the hand of Einstein, the hand of Jonas Salk with the mind and heart of all the physicians of all time to guide it, to bring an ever increasing store of healing skill for mankind in his hours of illness.

* * *

A break in the growth of the nation's mental hospital population is indicated, according to President F. Barry Ryan, Jr., of the National Association for Mental Health. The 1955 number of hospitalized patients rose by only 6,000 as compared with an average annual rise of 12,000 in the previous decade, reported Ryan. A voluntary organization, the NAMH is concerned with helping to solve problems of mental illness. Psychiatrists share with laymen in the operation of its program.

LAUNCHING THE MEDICARE PROGRAM

THE Dependents Medical Care Program, better known as "Medicare," became effective December 7. It inaugurated a service, unique in the medical profession, by providing civilian medical and hospital care for wives and children of service men at government expense.

Under Medicare, which was enacted by the 84th Congress on June 7 as Public Law 569, the Kentucky doctor is pioneering in a pattern of civilian-military medicine in the Commonwealth. His patient is a dependent of an active-duty member of the uniformed service and has been given a choice of treatment at a civilian or military hospital.

The introduction and implementation of this medical "first" in Kentucky is being repeated throughout the United States and its territories as the Defense Department administers the program and authorizes payment for civilian services according to an accepted fee schedule submitted by representatives of the individual states.

KSMA Action

On November 25, the KSMA House of Delegates, meeting in special session, adopted a fee schedule and a three-way contract entered into by the KSMA, the Department of Defense and the Kentucky Physicians Mutual, Inc. The Kentucky Physicians Mutual, Inc., as the KSMA fiscal agent, is administering the plan in the Commonwealth, with Blue Cross supervising hospital care and Blue Shield the physicians' service.

This fee schedule and contract were established through the negotiations of a special KSMA Medicare committee, composed of Robertson O. Joplin, M.D., Louisville, chairman, Gaithel Simpson, M.D., Greenville, and W. Vinson Pierce, M.D., Covington, with the Defense Department in Washington.

Law Creates Problems

The law poses many problems for the medical profession and many questions are being asked. What is its purpose? How did the final law come into being? What will it cost? What treatment is authorized?

The stated purpose of Medicare is "to create

and maintain high morale throughout the uniformed services by providing an improved and uniform program of medical care for members of the uniformed services and their dependents." The program is expected to reduce the requirements of the armed forces for physicians and remove the necessity for further extension of the Doctor Draft Law.

In 1953 the Moulton Commission reported its findings and recommendations for legislation on dependent medical care. The American Medical Association opposed the major recommendations on the grounds the legislation would expand military hospital establishment and cause the continuation of military induction calls for doctors.

In 1954 the AMA House of Delegates voted that "if it be the policy of the government to provide for medical care for dependents of service personnel, the services of civilian physicians and hospitals be used whenever possible, to be paid for at prevailing rates with provisions for free choice of physicians." Then, in 1955 Congress considered legislation for use of civilian sources.

Congress Approves

Last January 25, AMA representatives testified before a Congressional subcommittee, urging greater use of civilian and less of military facilities for dependents. It became increasingly apparent that civilian care for military dependents would be utilized by Congress. This legislative trend became a reality on June 7, with the enactment of Public Law 569. Congress directed that it should become effective six months later.

Medicare legislation covers dependent husbands, wives and children of personnel of the Army, Navy, Air Force, Marine Corps, Coast Guard, and the commissioned corps of both the U. S. Public Health Service and the Coast and Geodetic Survey. Prior to December 7 these dependents were often unable to use military facilities. Defense Department officials estimated that about 800,000 wives and children (about 40 per cent of those eligible) could not receive treatment at military hospitals due to overtaxed facilities, lack of specialized treatment or because the dependents lived too great

a distance from the nearest military medical center.

Kentucky's Contract

In setting up the program for civilian care, the government contracted with local state representatives all over the United States to handle the details of remuneration on an individual state basis. In addition to the approved fee schedule, Kentucky's contract provides for:

1. The encouragement of Kentucky physicians to cooperate with the program.
2. Recognition of the physician's right to refuse a case and the dependent's right to a choice of doctor.
3. Direction of administrative processing (payment of bills, etc.) to the fiscal agent.
4. Appointment of a review committee to consider and advise the government of complaints.
5. The necessity for proper identification of dependents.
6. Allowance for fee adjustment.
7. Right to renewal privilege on contract, which is binding through June 30, 1957.

Kentucky doctors participating in the program are doing so on a voluntary basis. But if they accept dependents as patients, they will be expected to abide by the fees agreed upon.

Expenses Involved

The Defense Department has set aside \$41 million to process the Medicare program through June 30. It has been estimated that after that date the program will cost between \$60 million and \$70 million annually.

The law provides up to 365 days of hospital care in semi-private accommodations and full hospital services when hospitalization is required for acute medical conditions, surgery, contagious diseases, emergency treatment, maternity and infant care. For this care, dependents will pay a total of \$25 or \$1.75 for each day hospitalized, whichever is the larger amount, with the government paying the balance of the hospital bill. For authorized outpatient care, dependents pay the first \$15 of the bill.

Patient Care

Civilian hospital care provided under the Medicare program is as follows:

1. Treatment of acute medical conditions.

This includes acute complications arising from chronic diseases.

2. Treatment of contagious diseases during hospitalization.
3. Treatment of surgical conditions only during hospitalization.
4. Complete obstetrical and maternity care, including prenatal and postnatal care.
5. Semi-private accommodations up to 365 days for each admission.
6. Services required by physician or surgeon prior to and following hospitalization for bodily injury and surgery.
7. Hospitalization and treatment for any acute emergency threatening a patient's life, health or well-being, including acute emotional disorders.
8. Diagnostic tests and procedures including laboratory tests and pathology and X-ray treatments when ordered by the doctor during the hospitalization period. Necessary procedures and tests prior to hospitalization will be paid up to a maximum of \$75. Payment is authorized up to \$50 for such procedures needed in aftercare for sickness or injury requiring hospitalization.

Medicare Exclusions

Medicare *does not* provide treatment considered outpatient in nature. Dependents will pay the usual fee for a routine visit to a civilian doctor.

Other care *excluded* is treatment for chronic diseases, nervous or mental disorders, medical or surgical treatment deemed optional, domiciliary care and ambulance service.

Dental care will be provided only as a necessary adjunct to medical or surgical procedures.

Identifying Dependents

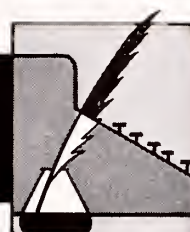
By July 1, 1957, identification of dependents will be made by use of a Dependents' Medical Care Card, (DD Form 1173), which will be issued by all the services. The card will show whether the dependent is to receive military or civilian care, or both. Identification will have to be made by the best means available until this card is issued.

No action will be taken against a doctor or hospital giving a patient medical care when it

(Continued on Page 68)



EDITORIALS



SOCIALIZED MEDICINE THROUGH SOCIAL SECURITY

THE PHYSICIANS of Kentucky have been circularized recently with propaganda in favor of inclusion of physicians under Social Security. The first circular inquired where one could find a twenty-five thousand dollar insurance policy for such a low cost. The second was more extensive and quoted Frank Dickinson, Ph.D., Director Medical Economic Bureau, American Medical Association, in such a way as to leave the impression that Dr. Dickinson favored Social Security for physicians.

It has been said that the Committee on Social Security for Physicians is a branch of the Physicians Forum, a decidedly left of center group of physicians who have testified several times before Senate Committees in favor of over-all socialized medicine.

The first circular was forwarded to Dr. Frank Dickinson, who replied that he would not dignify it with an answer; that his opinion concerning Social Security had been published a number of times in the Journal of the American Medical Association; that Social Security is not insurance but a method of buying votes of the old at the expense of the young; that it will probably end in a revolt of the young tax payers.

The Social Security Administration admitted that its unfunded debt obligation was approximately two hundred billion dollars in May, 1955. Against this the "trust fund" had twenty billion dollars in bonds (issued by the Treasury for this purpose) and about seven hundred million dollars in cash. (Social Security Bulletin, August, 1955, page 33.)

In Social Security after eighteen years, a report of the House Ways and Means Committee, we find the following: "The public has been misled into believing Old Age Survivors Insurance is insurance. Members of Congress have also been misled. We should not bind them (our children and our grandchildren) by contracts to pay future billions each year as the present system does." There is no contract with the Federal Government for benefits. The law states (Section 1104) "The right to alter, amend or repeal any provision of the act is hereby reserved to Congress." Congress can raise the tax, raise the sum to be taxed, etc. For the private physician it is another income tax and he pays one and a half times as much as others because he is self employed. It is possible to buy real insurance with a suitable contract from a sound insurance company for less.

JOHN T. BATE, M.D.

DR. MURRAY WARNS US

IN HIS ADDRESS before the A.M.A. House of Delegates in Seattle, Dwight H. Murray, M.D., President of A.M.A., emphasized anew the dangers to private enterprise inherent in the continuous encroachment of the Federal government upon the medical care of all the people. This may easily be gauged by the mounting cost per family for the government's

health and medical activities, presently \$54.61 per family per annum.

He stated that "many expenditures obviously are necessary to keep up our unsurpassed health standards . . . But there is no doubt that much money is being spent on medical activities that should not involve government participation. The trend is to spend more and more government money on health and medical matters because it is good politics . . . I think that a nation can drift into state medicine inch by inch just

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

Dr. Murray Warns Us

as surely as if the scheme were foisted upon a people overnight."

These expressions of caution seem appropriate and well timed. Constant vigilance on the part of the American public, not the medical profession alone, is necessary if we are to preserve the individual privileges believed to be fundamental to our welfare and continued progress. But in the complexities of our present day problems who can decide what is good or bad—by what processes can the health of our people be best improved? We have come to rely upon the opinions formed by agencies and bureaus chosen by the medical profession and, apart from governmental influence. The free and honest digest of these opinions by the Houses of Delegates of the A.M.A. and constituent state societies handed down to our local organizations and individuals tend to mold our personal choices.

Until now our efforts have been rewarding. State control of medical care has been avoided and the encroachments of governmental supervision have either been tempered or postponed. We are in a better position now than ever before because much larger numbers of our profession are thinking and working toward the best solution of health problems. We need the advice and counsel and warning of medical and non-medical leaders, but we need most a willingness to keep intelligently informed individually and to devote thought and effort to the implementing of our objectives. Free discussion of these problems in our local and smaller medical societies—committee work, and participation with non-medical groups interested in health matters must be our individual contribution toward the charting of a constructive course, and the pursuit thereof.

Sam A. Overstreet, M.D.

Launching the Medicare Program

(Continued from Page 66)

is done in good faith and it later develops the patient is not entitled to such care. Legal action will be taken only against the individual or sponsor of the fraud.

Bonafide dependents are those of "active duty" personnel. "Active duty" means service for a period exceeding 30 days. This eliminates

the serviceman on his annual two weeks' reserve training.

A dependent child is one who is unmarried and under 21 years of age, unless incapable of self-support, then age is no factor. A child is also considered a dependent if he is under 23 and duly enrolled in a school of higher learning pursuing a full-time course of study.

How Ky. MDs Are Paid

In order to receive payment for Medicare services, Kentucky doctors will have to fill out a section of a single page form which is available from the Kentucky Physicians Mutual. All KSMA members are reminded that where there are questions to be resolved they should contact the Kentucky Physicians Mutual, Inc., 231 West Main Street, Louisville.

The program provides for a review committee. Any misunderstandings or questions will be referred by the fiscal agent to this Council-appointed committee, authorized by the KSMA House of Delegates to adjudicate disputes and resolve complaints. At the December 13 meeting of the Council, the KSMA President and Chairman of the Council were authorized to appoint a review committee. Included on this committee are: Sam A. Overstreet, M.D., Louisville, chairman, J. A. Bishop, M.D., Jeffersontown, Roy A. Moore, Jr., M.D., Louisville.

Signed:

Robertson O. Joplin, M.D.
Chairman Special Medicare
Committee

Approximately 40 per cent of the civilian, non-agricultural employees in the United States are covered by some form of pension plan, in addition to Social Security coverage they may have, according to the Institute of Life Insurance. This percentage of civilian employees, about 20,000,000 in all, is up about 50 per cent from the end of World War II and four times the 1935 total. Exclusive of pension coverage, nine out of ten workers are now covered by the Old-Age and Survivors provisions of the Social Security Act and 5,400,000 old-age annuitants are presently receiving retirement benefits under this Act.



ORGANIZATION SECTION



12th RH Conference Promises to be Outstanding Meet

Rural medical achievement is joining with agricultural advancement to offer an outstanding program for the twelfth National Conference on Rural Health at the Brown Hotel in Louisville, March 7-9, 1957.

According to advance AMA program releases from Chicago, the conference theme, "Together We Build," will be emphasized by comparisons. Today's rural health advantages will be contrasted by speech, song and skit with yesterday's services.

Pertinent topics include: "How We Deliver Today's Medicine to Our Patients," "Problems in Progress in Medical Education," and the "Economic Situation in Agriculture." A young Kentucky intern, preparing for rural practice in his native Indiana, will tell why "I'm Heading for the Country."

Approximately 700 representatives from the 45 states comprising the conference are expected to share the hospitality of the Blue Grass State during the three-day session.

Organized by the AMA in 1945 "to help rural people help themselves to better health," the Rural Health program has increased its scope of services and membership each year. Various statewide organizations are cooperating under KSMA leadership in conference plans, including dental and nursing groups, the Farm Bureau, agricultural extension services, Homemakers, Women's Clubs, Parent-Teacher Associations, etc.

These groups, according to the AMA, are contributing their services in year-around programs under medical leadership to combat disease, sanitation and migrant labor problems, to promote immunizations and preventive medical practices, to reduce farm and home accidents and to offer educational services to rural people to meet the impact of modern living.

State Medicine Trend Seen By AMA President

The trend toward state medicine is increasingly apparent in the Government's continued spending of greater amounts on health and medical activities, according to Dwight H. Murray, M.D., president of the American Medical Association.

In an address before the AMA House of Delegates at Seattle on November 27, Dr. Murray cited federal spending as a political asset. He said that the "dishing-out of so-called gifts and bargains under the guise of benevolent economic planning" apparently satisfies many Americans.

Referring to the current federal medical budget, increased over last year's amount by \$290,000,000, Dr. Murray warned, "I think this nation can drift into

state medicine inch by inch just as surely as if the scheme were foisted upon a people overnight. The 'drift' method may take longer, but the result will be the same."

The AMA president acknowledged the "area of legitimate concern by the Government for the health and welfare of the people" but added, "it is time all of us sounded the alarm against soft and superficial security and against the invasion of personal responsibility." He called for the uniting of forces "for militant freedom and for full rights and responsibilities."

Co. Society Heads to Confer at Lexington April 4

Program plans are being completed for the 1957 County Society Officers Conference, to be held at the Phoenix Hotel in Lexington on April 4, according to Richard R. Slucher, M.D., KSMA president.

The luncheon address will be given by United States Senator Thurston Morton of Louisville. Other program features include a nationally known AMA speaker, well versed in county society interests and a panel discussion on problems dealing with the Kentucky Physicians Mutual, Inc.

The day-long conference is planned primarily to meet the needs of county society officers, who are responsible for leadership at the all-important grass roots level of organized medicine in Kentucky, stated Doctor Slucher. The program is likewise expected to attract county committee chairmen who work closely with the officers.

In addition, all state officers and state committee chairmen will attend the conference.

RH Council to Have Program at Farm and Home Week

The Kentucky Rural Health Council will present a program on January 30 before the women's general session of the annual Kentucky Farm and Home Convention at the University of Kentucky, Lexington.

The program will include a panel on accident prevention on which Walter L. O'nan, M.D., Henderson, will appear and highlight a demonstration of a physical examination of a woman and a child. Members of the KSMA Rural Health Committee will conduct the examinations, assisted by representatives of the Kentucky State Association of Registered Nurses.

Frank L. Duncan, M.D., Monticello, will examine the woman and Cecil W. Ely, M.D., Manchester, the child. Daryl P. Harvey, M.D., Glasgow, will serve as commentator during both examinations to explain the step-by-step process.

Approximately 2,000 women are expected to attend the program, according to Wyatt Norvell, M.D., New Castle, Council chairman.

KSMA Members Invited to Cincinnati Centennial

All Kentucky physicians, their families and patients are invited to attend the 100th Birthday Party of the Cincinnati Academy of Medicine, Feb. 27 through March 5, 1957.

A Health Museum and Exposition at Cincinnati's Music Hall will highlight the week-long celebration, with 175 health and scientific exhibits on display in the north and south halls. They will represent medicine, hospitals, research centers, public health, nursing, pharmacy and industry. Featured among the exhibits will be an atomic energy display, "Atoms for Peace," from the American Museum of Atomic Energy.

"Juno," a full-sized, activated manikin on loan from the Dominican Republic will occupy a prominent place in the main foyer. Juno operates electrically and will demonstrate blood vessels, bones and organ structures of the body.

A 100 year history of the Academy, entitled "The Doctor's Forum," has been prepared for distribution at the centennial.

Code of Ethics Claims Top Interest at AMA Meet

The ten-section revision of the Principles of Medical Ethics was the subject of greatest interest in the House of Delegates at the recent AMA Clinical Meeting in Seattle. Originally submitted last June at the Chicago Annual Meeting, the proposed short version as revised was re-submitted at Seattle.

The changes were based on Constitution and By-Laws and the House of Delegates referred the matter back to the Council on Constitution and By-Laws for further study. The reference committee's report stated in part: "The Preamble and seven of the ten sections appear to be acceptable . . . Sections 6 and 7 were not acceptable . . ."

Four areas of Sections 6 and 7 cited as needing more attention were: division of fees, dispensing of drugs and appliances, corporate practice of medicine, and greater emphasis on the relationship between physicians and patients.

The House revised AMA policy on veterans' medical care by endorsing a suggestion of the Council on Medical Service that: "With respect to medical care and hospitalization benefits for veterans . . . new legislation be enacted limiting care to veterans with peacetime or wartime services whose disabilities or diseases are service-incurred or aggravated."

A reference committee report was adopted recommending continuation of interim AMA sessions after a resolution was rejected that interim meetings be discontinued. Recognition was urged of chronic alcoholism as a medical problem and of the admittance of alcoholics to hospitals for treatment.

An amended directive, relating to a progress report of the Committee on Medical Practices, was approved to read: "The AMA representatives on the Joint Commission on Accreditation of Hospitals be instructed to stimulate action by that body leading to the warning, provisional accreditation, or removal of

accreditation of community or general hospitals which exclude or arbitrarily restrict hospital privileges for generalists as a class regardless of their individual professional competence where such policies adversely affect the quality of patient care rendered. Any action taken should be only after appeal to the Commission by the county medical society concerned."

In other action the councils on Pharmacy and Chemistry and on Foods and Nutrition were directed to conduct a joint study on fluoridation of public water supplies. Also, a change was made in the By-Laws relating to transfer of membership so that an active or associate member who moves to another location may continue his AMA membership by applying for membership in the association of his new jurisdiction.

Heart Assn. Issues Revised Rheumatic Fever Guide

Revised recommendations for prevention of rheumatic fever attacks are found in a new edition of the American Heart Association's statement on "Prevention of Rheumatic Fever and Bacterial Endocarditis Through Control of Streptococcal Infections."

This second revision appears in the December issue of "Modern Concepts of Cardiovascular Disease," the Association's monthly bulletin, sent free to 450 Kentucky physicians, and in the January issue of "Circulation," the Association's journal of clinical cardiology. The AHA Committee on Prevention points out that no recommendations can be considered final but that they will continue "as new knowledge may indicate."

The principal changes are: (1) emphasis on throat cultures in diagnosing streptococcal infections; (2) qualification of the duration of prophylaxis in that it should be indefinite for known rheumatic subjects but makes exception for adult patients without recent attacks; (3) lists first among prophylactic methods the monthly injection of 1,200,000 units of benzathine penicillin G. intramuscularly, and that when oral penicillin is used it should be in units of 200,000-250,000 twice daily.

Other recommendations include dosages for prophylaxis against bacterial endocarditis in such patients obliged to undergo dental extractions, tonsillectomies, etc. The preferred combined oral and parenteral route of administration is: oral penicillin (200,000-250,000 units four times daily) for two days before and two days after surgery, with the same dosage on the day of surgery plus 600,000 units of aqueous penicillin with 600,000 units of procaine penicillin shortly before operation.

The 1957 fund drive of the American Medical Education Foundation will open Sunday, January 27, at the Drake Hotel, Chicago. Each state may send one delegate, although all interested physicians are welcome. Emphasis at this sixth annual meeting will be on exchange of ideas and the formation of AMEF developments.

Dr. McPheeters is New Mental Health Commissioner

Harold L. McPheeters, M.D., a native New Yorker, becomes the second commissioner of the State Mental Health Department on January 15. He succeeds Frank M. Gaines, Jr., M.D., Louisville, who resigned. Doctor Gaines has been commissioner since the establishment of Mental Health on a departmental status in 1952. His future plans are indefinite as we go to press.

A graduate of Easton College at Lafayette, Pa., the 33-year-old Doctor McPheeters received his medical training at the U. of L. Medical School, where he graduated in 1948. He interned at City Hospital, Springfield, Ohio, and served a three-year residency at Norton Infirmary's Psychiatric Clinic in Louisville. Before his appointment as assistant commissioner of Mental Health in April 1955, Dr. McPheeters had been a psychiatrist at Ellis Hospital, Schenectady, N. Y.

The Department's various services, including hospital treatment, out-patient care, training, research, education and consultation, which were largely instituted by Doctor Gaines, according to Doctor McPheeters, will be continued, he said. "During the past one and one-half years," he added, "the population at the four state mental hospitals has steadily decreased. A census report covering July 1, 1955 through June 30, 1956, shows a decrease of 405 patients even though admissions were up by 300 more than the previous year."

"It is our aim to continue this decrease," he said, "and we are developing plans to contact doctors all over the state, asking them to do psychiatric screening of patients being considered for admission to mental hospitals and a follow-up service of those being discharged."

One of the most pressing problems facing his department is the recruiting of professional personnel, the new commissioner said. He cited as one example the continuing vacancy of a superintendent at the State Hospital at Hopkinsville.

Health Column to Appear In The Kentucky Farmer

A new national rural health service is being inaugurated with a health column for state farm magazines, according to Aubrey Gates, executive director of the Council on Rural Health of the American Medical Association.

KSMA Rural Health Committee, is helping to make this service available to Kentucky readers through a monthly feature to be released to THE KENTUCKY FARMER. This series is expected to start in the February issue, under the heading "For Your Health." J. O. Matlick, editor and general manager of THE KENTUCKY FARMER, says, "I have long hoped for such a service and am delighted with it."

Shelby L. Hicks, M.D., New Castle, is one of the doctor-writer contributors throughout the United States who are preparing articles for the column. Robert Perkins, science writer for the Rocky Mountain News of Denver, is editing the series. The 75 articles currently written for publication cover a wide

variety of health subjects from the age-old common cold to the new wonder drugs.

Senior Day, April 15, Offers Guidance to Future MDs

Future physicians soon to leave the University of Louisville Medical School will be honor guests at the third annual Senior Day Program on April 15, according to Richard G. Elliott, M.D., Lexington, chairman of the Senior Day Committee.

This one-day preparatory seminar for private practice is sponsored by the KSMA in cooperation with the University of Louisville Medical School and the Jefferson County Medical Society. The morning session will be held at the Rankin Amphitheatre at General Hospital. The afternoon and evening programs will be given at the Kentucky Hotel.

Phases of the transition from class room to actual practice to be covered at the Senior Day Program include internship, choosing a field and a location, setting up a practice, the doctor-patient relationship, the physician's economic side, and a personal code for professional self-esteem. Approximately 100 seniors are being invited to attend the day's activities.

Ky. MDs to Present Papers at ACS in New Orleans

Two KSMA members will present scientific papers during the four-day Sectional Meeting of the American College of Surgeons in New Orleans, February 4, 5, 6, 7. They include, according to an ACS program release, Hugh B. Lynn, M.D., whose subject is pediatric surgery, and Robert Lich, M.D., in the field of urology. Both physicians are from Louisville.

Coleman C. Johnston, M.D., Lexington, Governor of the College from Kentucky, states that all surgeons and physicians are invited and urged to attend this comprehensive meeting. It is expected to attract more than 2,000 surgeons and related medical personnel from Canada and the United States.

The program includes panel discussions, symposia, scientific papers, cine clinic films in general surgery and separate programs in the specialties. A joint nurses' program will include discussions on the health team in action in surgery of the lung, care of patients with burns, care of aged surgical patients and immediate postoperative care.

Postgraduate Symposium on TB to be Held Jan. 24

A Postgraduate Symposium on "Diseases of the Chest" will be held at District Two State Tuberculosis Hospital in Louisville on January 24.

Topics for discussion include "Fungus Infections, Differential Diagnosis," by Daniel Pickar, M.D., Louisville; "Detection of Tuberculosis in Younger Groups, in Older Groups," Adam Miller, M.D., Lexington; "The Home Treatment of Pulmonary Tuberculosis," Boyce Jones, M.D., London; "The Hospital Treatment of Pulmonary Tuberculosis," W. Duane Jones, M.D., Ashland.

An evening program, the 30-minute discussions will begin at 6:30 o'clock. The Louisville hospital is one of six State TB hospitals in Kentucky.

Third Fund Drive Under Way for Medical Library

The third annual campaign is under way to enlarge the group of Friends who donate to the 120-year-old Louisville Medical Library. According to the Library Committee, 110 Friends gave \$1,885 for its work the past year, a 40 per cent increase over the first campaign.

The long-established library also acquired 15 new journals during 1956, purchased 153 individual volumes, bound 150 volumes, and received prized reference books from the collections of deceased members of the Jefferson County Medical Society as presented by relatives.

The Louisville Medical Library has been doing some befriending of its own, by lending whole sets of journals for microfilming to the new University of Kentucky Medical School at Lexington for its future library.

Friends of the Louisville library are listed as "Sustaining Members" when they contribute \$10, "Fellows" when they give from \$25 to \$50, and "Patrons," for \$100 or more. Checks should be made to the Louisville Medical Library and sent to the: Jefferson County Medical Society, 981 South Third Street, Louisville 3.

Five Physicians Are Named to 1957 Awards Committee

The KSMA Awards Committee, to select nominees for the 1957 winners of the Distinguished Service and the Outstanding General Practitioner awards, has been named by Clyde C. Sparks, M.D., Ashland, Speaker of the House of Delegates.

Included on the committee are: Chairman Hugh P. Adkins, M.D., Louisville, R. Ward Bushart, M.D., Fulton, Glenn U. Dorroh, M.D., Lexington, Barton L. Ramsey, Jr., M.D., Somerset, and Edward L. Smith, M.D., Covington.

Nominations may be submitted by individual members or by county societies to the committee through the Headquarters office, according to Chairman Adkins. The list will be first considered at a special meeting during the County Society Officers Conference in Lexington on April 4. A final report, including the committee's nominations, will be presented to the 1957 House of Delegates prior to the naming of this year's winners.

The written nominations should include specific reasons why the subject is considered eligible for either of these high KSMA awards. Those for the Distinguished Service Award should be based on worthy contributions to community health, research, Associational progress, scientific education endeavors, etc.

The Outstanding General Practitioner Award will

be made to the Kentucky doctor whose community worth has been felt to the extent that his nomination would cause his selection above other names presented.



Lawrence A. Davis, M.D., (right) Louisville radiologist, receives congratulations for himself and William C. Adams, M.D., (not shown) both associated with the University of Louisville Medical School, in front of their prize winning scientific exhibit, from Ivan J. Miller, M.D., San Francisco, at the December meeting of the Radiological Society of North America at Chicago. The Doctors Davis-Adams exhibit demonstrated X-ray findings of childhood TB patients receiving therapy. More than 2,500 radiologists attended the Chicago meeting.

Regional ACP Session Held at Nashville Dec. 8

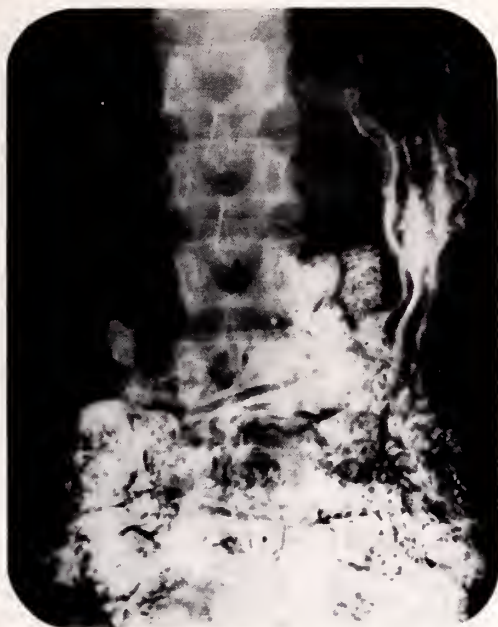
The second regional meeting of the Kentucky-Tennessee membership of the American College of Physicians was held at Nashville on December 8, according to Sam A. Overstreet, M.D., Louisville, governor for Kentucky.

Doctor Overstreet and some 40 other Kentucky members joined approximately 60 Tennessee members at the Hermitage Hotel to hear Walter L. Palmer, president of the American College of Physicians and essayists from both Kentucky and Tennessee present scientific papers and case reports. One of the regents of the College, J. Murray Kinsman, M.D., dean of the University of Louisville Medical School, was also present.

Kentucky physicians appearing on the program included John S. Llewellyn, Meyer M. Harrison, Lawrence S. Davis, Sol J. Rosenberg, William P. Peak, Thomas D. Stevenson, all of Louisville, C. Edward Rankin, Lexington, and William H. Anderson, Harlan.

The 1955 meeting was held in Louisville with Doctor Overstreet as host.

Reduced Hypermotility with Pro-Banthine® Improves Visualization



*Posterior-anterior film: definite hyperperistalsis with poor duodenal visualization.**



Posterior-anterior film after 15 mg. of Pro-Banthine intramuscularly: chronic duodenal ulceration clearly disclosed.

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By controlling the hypermotility, Pro-Banthine may permit delineation of a lesion otherwise not clearly visualized.

The technic is simple: If the first set of films shows hypermotility but no filling defect is demonstrable, reexamination is

done a few minutes after intramuscular injection of 15 mg. or a half hour after oral administration of 30 mg. of Pro-Banthine.

This procedure has the additional advantage of demonstrating the patient's response to a given dosage of the drug.

G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

*Roentgenograms courtesy of I. Richard Schwartz, M.D., Kings County Gastrointestinal Clinic, Brooklyn, N.Y.

SEARLE

Major Change is Effected in Blue Cross Operation

Blue Cross national hospital prepayment activities include a major change, according to D. Lane Tynes, Executive Director of the Blue Cross-Blue Shield of Kentucky.

As a national enrollment agency, Blue Cross now offers the employer with branches in various states a central spokesman through which either Blue Cross or uniform national benefits can be purchased for his employees. The Blue Cross Approval Program, requiring at least one-third of the members of a Plan's Governing Board to be representatives of contracting hospitals, remains unchanged.

The official trade association, the Blue Cross Commission, also will continue, said Mr. Tynes, retaining activities involving service to nonprofit health plans as distinct from services to national employers and subscribers. He reports that of the 52 million persons enrolled in Blue Cross, 600,000 are from Kentucky.

Detection Drive Shows 77 New Diabetics

Incomplete reports from over the State, tabulated as we go to press, show that 24,221 urine sugar tests were made during the 1956 Diabetes Detection Drive, November 11-17.

Of these tests 392 have been found positive and 183 of the persons tested are proved diabetics. The reports disclose the discovery of 77 newly proved diabetics during the drive.

"It is expected that many reports will yet come in," stated Carlisle Morse, M.D., chairman of the KSMA Associate Committee on Diabetes, "because a serious effort is being made by county diabetes chairmen to provide information on the names of proved diabetics discovered through the drive, and this follow-up takes time."

Dr. Morse urges doctors who have information pertaining to the identity of discovered diabetics to report it to their county committees as soon as possible.

Need for Professional Nurses Is Career Opportunity

Continuing demands for nursing service afford opportunity for thousands of career-minded young people to enroll in the nation's 1125 schools of nursing, according to the National League of Nursing.

The basic professional programs prepare students for careers in from two to five years. Practical nursing programs are usually twelve months long. Graduate programs are offered in baccalaureate, master's and doctor's degree levels. Some 50,000 students can be admitted each year to professional training and 20,000 can enroll annually in practical nursing programs.

A report of the League shows that there are now 430,000 registered professional nurses employed in hospitals and related institutions, public health, nurs-

ing education, doctors' offices, industrial nursing and other fields. This figure provides 259 professional nurses per 100,000 population. An additional 70,000 are needed to reach the desired goal of 300 professional nurses per 100,000 population.

SAMA Journal Has New Name

Beginning with the current (January 1957) issue, the journal of the Student American Medical Association will be known as THE NEW PHYSICIAN, according to Robert G. Overstreet, president of the U. of L. Chapter of the Student AMA.

New editorial features and an increase in circulation to include resident physicians as well as the present readership audience of medical students and interns, is to become effective with the adoption of the new name.

Dr. Fraser Heads Health Div.

Helen Belknap Fraser, M.D., formerly of the West Virginia Health Department, has been named director of the Division of Maternal and Child Health of the Kentucky State Health Department.

Doctor Fraser succeeds Paul Schneck, M.D., now full-time school health director. A graduate of Rush Medical College, Chicago, in 1941, Doctor Frazer interned at Oak Park, Ill. Hospital, had two years training in children's diseases at Chicago's Cook County Hospital, followed by five years of private practice in Charleston. Later she received a master-of-public-health degree from the University of Pittsburgh Graduate School of Public Health.

UK to Get \$1.2 Million Grant

The US Public Health Service has announced the awarding of a \$1.2 million grant to the University of Kentucky at Lexington. The money will be used to help finance construction of a medical sciences building, the first unit of the new UK Medical School, according to Frank G. Dickey, Ph.D., UK president.

This grant is one of the four largest among 73 awarded by the Public Health Service to institutions in 24 states and the District of Columbia to build health research facilities. The remainder of the cost of the UK medical sciences building is expected to come from appropriations by the state legislature, stated Dr. Dickey.

Sixth District Elects Officers

A. O. Miller, M.D., Scottsville, was elected president of the Sixth Council District on December 5 at a district dinner-meeting held at the TB Hospital at Glasgow, according to L. O. Toomey, M.D., Bowling Green, Sixth District Councilor.

Lee Vensel, M.D., Franklin, was named vice-president and Harold Keen, M.D., Bowling Green, was re-elected secretary. Host for the meeting was the Barren County Medical Society. Following a discussion of the diagnosis of tuberculosis by the general practitioner, led by John Gross, M.D., of Rome, Ga., the group accepted an invitation to meet at Franklin in March.

First to Pay 1957 Dues

For the second consecutive year, Carl Cooper, Jr., M.D., Bedford, is the first KSMA member to pay KSMA and AMA dues for 1957. Dr. Cooper is a graduate of the U. of L. School of Medicine in the class of 1952.

Harlan Doctors Honored

E. M. Howard, M.D., president of the Kentucky State Board of Health, and W. P. Cawood, M.D., Harlan County Health Officer, both of Harlan, were recently honored at a surprise banquet given by the Harlan Mountain Trail Chapter, Daughters of the American Revolution.

Boyhood schoolmates, these two Harlan doctors received their medical training at the University of Louisville. They established the first Harlan Hospital in 1915. Originally a 12-bed institution, the hospital has now grown to one of an 83-bed capacity. Clark Bailey, M.D., another Harlan physician and surgeon, appeared on the program of tribute.

GPs to Meet at St. Louis

More than 5,000 of the nation's family physicians are expected to attend the Ninth Annual American Academy of General Practice Scientific Assembly, March 25-28 at St. Louis.

During the four-day meeting, discussions will center on infertility polio vaccination, and the "neglected" pediatric areas—the eyes, ears, and feet. The Academy's policy-making Congress of Delegates will convene at 2 p.m., March 23. Kentucky's GP delegates are Charles G. Bryant, M.D., Louisville, and Frank L. Duncan, M.D., Monticello.

Covington Doctors Honored

Three Covington doctors have been honored for 25 years' service with the medical staff of St. Elizabeth Hospital. They are: John Rolf, M.D., Joseph Molony, M.D., and William Miner, M.D.

Tribute was paid to their work at a hospital dinner sponsored by the Sisters of the Poor of St. Francis, who are in charge of St. Elizabeth. Approximately 140 staff members and their wives attended the dinner.

Med Students Have 'Own Doctor'

Leonard Davidson, M.D., retired chairman of the U. of L. Medical School's department of pediatrics, now heads the new Student Health Service for clinical treatment to the school's medical and dental students.

Some 675 students who formerly received medical service from the staff at General Hospital are now channeled to the clinic for routine physical examinations, chest X-rays and tuberculosis skin tests. Treatment for more serious ailments is referred elsewhere.

Spencer Doctor Heads C. of C.

M. H. Skaggs, M.D., Taylorsville, was named chairman of the Spencer County Chamber of Commerce at a recent dinner-meeting held at the First Baptist Church at the county seat. The group's principal activity is now directed toward the erection of a community center at Taylorsville. Preliminary plans for the center were presented at the business meeting.

Ky. MDs Go To Seattle

According to the Daily Bulletin issued at the meeting, the following KSMA members attended the AMA Clinical session on November 27-29 in Seattle: Robert C. Long, M.D., Louisville; W. Vinson Pierce, M.D., Covington; G. Y. Graves, M.D., Bowling Green; John J. Pepper, M.D., Ashland; Thomas H. Biggs, M.D., London.

Chest Ills Parley Held

Physicians and public health workers from some 14 Eastern Kentucky counties recently attended a post-graduate symposium on chest diseases at Ashland. The symposium was under the joint sponsorship of the Kentucky Academy of General Practice and the State Tuberculosis Hospital Commissions, and was held at District Four State Tuberculosis Hospital.

Film Interest Spans Ocean

The international medical film program, to be held in New York June 3-7, during the AMA's 1957 annual meeting, is creating interest abroad according to Ralph P. Creer, AMA director of Motion Pictures and Medical Television. He states that the many applications received indicate an extensive program of medical films made in other countries.

The program's aim is to bring before the doctors the outstanding pictures produced abroad dealing with medical science. Showings have been scheduled to permit participants to visit scientific exhibits, color television and other programs as AMA guests. Applications and further information can be obtained from: Motion Pictures and Medical Television, 535 North Dearborn St., Chicago 10.

Ky. Student is Rhodes Aspirant

James W. Smith, 21, of Fonde in Eastern Kentucky, was selected as one of two candidates from Kentucky to compete at Chicago for a Rhodes scholarship. Smith is a freshman at the University of Louisville School of Medicine. Four winners are to be named by the Great Lakes regional committee at Chicago.

Dr. Averitt is Scout Leader

Thomas E. Averitt, M.D., Winchester, has been elected chairman of the Midland Trail District Boy Scouts of America. The district covers 12 counties in Eastern Kentucky in which there are approximately 1,000 Scouts registered. A life-long friend of Scouting, Dr. Averitt plans further expansion of the Midland Trail program.

STUDENT AMA

The Student American Medical Association was founded in 1950. This move was made in the form of a resolution introduced at the House of Delegates of the American Medical Association on behalf of a group of students from the University of Virginia School of Medicine.

This convention of the A.M.A. underwrote a Constitutional Convention when SAMA was officially born. At present there are seventy-two active chapters from the eighty-one American medical schools, with a total of over 30,000 medical student and intern members.

This Association was established, "... to advance the profession of medicine, to contribute to the welfare and education of medical students, to familiarize its members with the purposes and ideas of organized medicine, and to prepare its members to meet the social, moral, and ethical obligations of the medical profession."

Each local chapter is set up to operate independently with the exception of its adherence to the constitutional clause "... that no such society may refuse membership on the basis of race, religion, color, or sex ..." In addition to active members in active chapters, there are three classes of membership: Members-At-Large which includes interested students in schools where no active chapter exists or American students studying in foreign medical schools, Graduate Membership which applies to former members who have completed their internship, and Honorary Membership which covers friends of SAMA as well as others not covered under existing constitutional provisions.

The Association, a not-for-profit corporation under Illinois law, is supported by the dues of its members and revenue from sources including The Journal, annual convention exhibits, a group life insurance program, and other sundry activities.

The publication of the Association is a one hundred page Journal distributed monthly October through June to medical students and interns. Its circulation soon will reach 50,000 when residents begin receiving copies.

SAMA Life is an insurance program presented to SAMA members in 1954. This policy provides insurance at the rate of \$5 per \$1,000 with a limit of \$10,000 a year and includes waiver of premium for disability, double indemnity for accidental death, and no war clause or medical examination.

The SAMA Foundation is scheduled to start its loan program in 1957. As grants accumulate, loans of up to 1,500 annually carrying a 2 per cent interest rate are contemplated. Destined to become one of the finest of all SAMA projects, the Foundation will also serve to attract interested and qualified individuals into the practice of medicine.

The Annual Convention of the SAMA is the big event of the year which is complete with a scientific program, technical exhibits, and social functions. These annual sessions attract 1,500 to 2,000 members and friends annually. This convention includes reports of various committees, but most specifically those of the two standing committees, The Standing Committee on Medical Education and The Standing Committee on Graduate Training. These committees are the effective voice of medical students and interns the nation over.

The University of Louisville Chapter is indebted to the Kentucky State Medical Association for its enthusiastic support of this convention by way of covering the primary expenses of four delegates from this school.

On our local level, all incoming freshmen are given orientation pamphlets which fully explain the organization and function of SAMA. For a fee of \$10 the freshmen have available all of the above mentioned facilities of the national Association for a period of five years, including the intern year. This fee also covers the local dues for their full time in school, and a four year subscription to the Kentucky State Medical Assn. Journal. The function of the local chapter is primarily to handle memberships, Journal subscriptions and addresses, insurance applications, and procurement of speakers of interest on pertinent subjects and speakers for the annual Spring SAMA Lectureship.

This year, 70 of the 103 freshmen have already joined. This represents an average figure per class and indicates interest manifest by these physicians-to-be in the profession that will be theirs in the very near future.

ROBERT G. OVERSTREET, President
U. of L. Chapter, Student AMA

Jewish Hospital Will Expand

The Jewish Hospital in Louisville has announced that it will sponsor a January-February \$700,000 fund drive for hospital additions. A top floor will be added, increasing the 118 bed capacity to 185.

Harry J. Klein, president of the hospital board, said that the hospital had been operating "in excess of maximum capacity" for over a year with demands for beds increasing. The hospital is housed in a new four-story building, finished in 1955 at a cost of \$2,649,000.

The AMA is reassessing its stand favoring fluoridation of drinking water, according to David B. Allman, M.D., Atlantic City, president-elect of the AMA. Dr. Allman said a special five-man committee is studying the results of fluoridation which many cities throughout the country adopted following the four year old AMA endorsement of the addition of fluorides to water supplies as a deterrent to tooth decay in children. "We want to make sure that our previous position is still sound," said Doctor Allman.

Application

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1957 Annual Meeting

Kentucky State Medical Association

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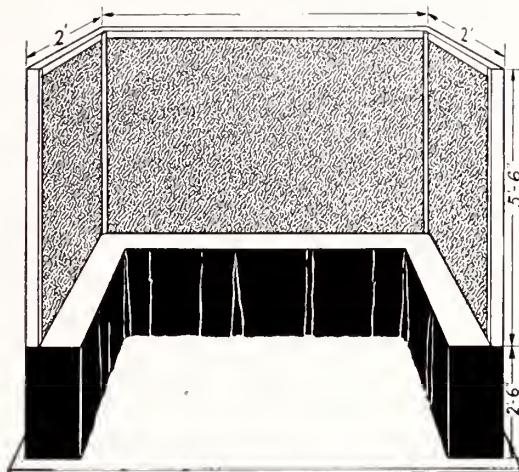
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(Applications for space should be received
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Dimensions and structure of K.S.M.A. Scientific
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4. Give approximate amount of wall space needed. (Included in total space is two side walls of two feet in length)
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The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.

AMA Names "GP of the Year"

Edward M. Gans, M.D., Harlowton, Montana, was selected as "General Practitioner of the Year," by the AMA House of Delegates in the recent Clinical Meeting at Seattle. The 80-year-old Montana physician has practiced medicine for more than half a century.

Dr. Gans was selected "General Practitioner of the Year for Montana" last September. This 1956 Gold Medal Doctor, honored for exceptional service to his community, is a graduate of the University of Minnesota Medical School in the Class of 1905.

Maysville MDs Open Clinic

Three Maysville physicians, Mitchel B. Denham, M.D., his brother Harry Denham, M.D., and George Estill, M.D., have opened Maysville's first clinic. The clinic was built at a cost of \$75,000. The staff is expected to receive a fourth physician in the near future.

U of L Science Award Renewed

Among the eighty-nine contract renewals of research awards made by the Atomic Energy Commission to universities and private institutions to foster development in the atomic energy field, is the one-year renewal to the University of Louisville.

The \$9,665 award, provided under the amended Atomic Energy Act in 1956, will allow continuation of research at the University of Louisville of Synthesis and Properties of Organic Scintillators.

Health Head Accepts Post

Russell E. Teague, M.D., State Health Commissioner, has been named to the commission on dental education of the Southern Regional Education Board. The commission recently received a \$10,000 grant from the Kellogg Foundation that will provide for a study of the South's dental resources.

Med Society Receives Non-MD

The Jefferson County Medical Society recently received S. I. Kornhauser, Ph.D., as an honorary member. Dr. Kornhauser has been professor and chairman of the department of anatomy at the U. of L. Medical School since 1922. He is also chairman of the Louisville Medical Library.

A Cleveland native, Doctor Kornhauser was graduated from the University of Pittsburgh as a biology major. He received master and doctors degree from Harvard, and later studied in Germany. Before coming to Louisville he taught at George Washington, Harvard and Northwestern universities. He has written more than 25 published papers on anatomy and biology.

Dr. Hower Heads Dental Group

Frank B. Hower, DDS, Louisville, an oral surgeon and lecturer in oral surgery at the U. of L. School of Dentistry, has been reappointed chairman of the Council on Hospital Dental Association. Dr. Hower has served as chairman for five years.

DIGEST OF PROCEEDINGS

SPECIAL CALLED MEETING

of the

KENTUCKY STATE MEDICAL ASSOCIATION HOUSE OF DELEGATES

November 25, 1956

Clyde C. Sparks, M.D., Ashland, Speaker, Presiding

The Speaker of the House called the meeting to order at 12:45 p.m., Sunday, November 25 and announced 66 registrants were present.

Delmas M. Clardy, M.D., Chairman of the Credentials Committee, stated a quorum was present.

The Speaker called on the KSMA President, Richard R. Slucher, M.D., for introductory remarks. Doctor Slucher explained that in connection with the Dependents' Medical Care Act (Public Law 569, 84th Congress), which becomes effective December 7, 1956, the Defense Department had turned down some of the fees submitted by KSMA. As a result, the Executive Committee authorized a special committee of three physicians—Robertson O. Joplin, M.D., Gaiethel L. Simpson, M.D., and W. Vinson Pierce, M.D.—and also the Executive Secretary to go to Washington to negotiate with the Defense Department for the establishment of an acceptable fee schedule. The purpose of this meeting was to present the proposed fee schedule and contract between KSMA, the Kentucky Physicians Mutual, and the Department of Defense to the House of Delegates for action.

The Speaker asked permission to conduct the meeting on an informal basis with all delegates participating.

Carlisle Morse, M.D., moved the request of the Speaker be adopted. The motion was seconded and carried.

The Speaker asked Doctor Joplin to bring the delegates up-to-date on the Medicare program. In complying, Doctor Joplin pointed out that Public Law 569 had been passed officially and would go into effect December 7.

Doctor Joplin who had been appointed to represent Kentucky attended the special AMA meeting in Chicago when representatives of all states were invited to present their views on the fee schedules to be adopted. Following this meeting in Chicago (July, 1956) the Executive Committee appointed a special committee composed of Doctors Joplin, Simpson, Pierce, Clardy and Thos. Meredith, M.D., to study and report on the situation. This committee, with Doctor Joplin a chairman, held several meetings prior to the Annual Meeting of KSMA, when the first 200 fees requested by the Government were presented and acted upon. Subsequently, the Executive

Committee authorized Doctor Joplin, with Doctors Simpson and Pierce and the Executive Secretary, to go to Washington to negotiate directly with the Office of the Executive Director of the Dependents Medical Care Program. At that time the fee schedule and contract to be presented were agreed upon by the negotiators.

Doctor Joplin then asked Doctor Simpson to make a few comments on the program. Doctor Simpson emphasized this was a service plan. He said provision was made for unusually long or difficult procedures not covered in the fee schedule and he explained the functions of the review committee.

Doctor Pierce, who was asked to present his views, commended Doctor Joplin for his work on the program. Doctor Pierce also emphasized the following provisions: (1) fee for service system is preserved, (2) free choice of physician by the patient, and (3) the physician's privilege to refuse to accept a case.

The Speaker called on D. Lane Tynes, Executive Director of the Kentucky Physicians Mutual, to comment on the fiscal agent's part in the proposed contract. Mr. Tynes said the Kentucky Physicians Mutual, Inc., had been selected as fiscal agent by the KSMA House of Delegates for the administration of the Dependents Medical Care Act in Kentucky. Kentucky Physicians Mutual will receive only its cost. Payments to physicians will be made promptly and the Government will reimburse The Physicians Mutual. The Defense Department will provide identification cards.

The Speaker thanked Doctors Joplin, Simpson, and Pierce and Mr. Tynes for their helpful information; and said the fee schedules would be distributed, after which there would be a ten-minute break to allow the delegates to study the fees.

The Speaker called the meeting to order again and introduced A. B. Barrett, M.D., Lexington, and said that although not a delegate, Doctor Barrett had asked to be heard by the House.

Doctor Barrett said he did not intend his message as a criticism of the special committee appointed to draw up the fee schedule. He felt the members had done good work with a difficult problem. He felt the real issue of the matter was "Socialized Medicine," in that a full fee service

Traffic Film Available

A 14-minute documentary film on prevention of automobile accidents, entitled "On Impact," has been made available to state medical societies by the American Medical Association.

The film shows the cooperation of the medical profession and the automobile industry on safety measures. It was produced jointly by AMA and the Ford Motor Company and emphasizes the physician's work in accident prevention as well as providing the industry with vital reports on crash victims for safer car designing. For further information, write: KSMA Headquarters Office, 620 South Third St., Louisville, Ky.

Digest of Proceedings (Cont.)

plan would fail to recognize the variations in doctors' expenses and particular qualifications. Doctor Barrett felt an indemnity clause would offer assurance of a safeguard against socialized medicine and also enable the service man to apply the specified amount toward payment for the services of a doctor of his choice. Doctor Barrett expressed hope that Kentucky would be one of the states that would lead the way in this endeavor.

A brief discussion followed Doctor Barrett's presentation, after which Carroll L. Witten, M.D., moved that the committee, Doctor Slucher, and Mr. Sanford be commended for their efforts and that the plan as proposed be adopted. Chrisman S. Jackson, M.D., seconded the motion.

Theodore L. Adams, M.D., moved that Doctor Witten's motion be amended to state that the plan be accepted only as an indemnity plan. The amendment was seconded by Richard G. Elliott, Jr., M.D.

A general discussion followed on whether the law could be interpreted as permitting KSMA to insist upon an indemnity service plan in lieu of a full fee service plan. The speaker read a letter from Paul I. Robinson, Major,

M.C., Executive Director, Office for Dependents' Medical Care, Washington, D.C., which pointed out there was no question that the contract provides for full service coverage. The letter further stated that in instances of an unusual nature in which the physician might feel an allowance greater than prescribed might be due he should look to the Government for additional payment and not to the patient. Such additional payment will be made upon approval by the state's review committee and the Government's contracting officer.

Further discussion followed during which some delegates expressed feeling that practically no provision was made for home or office patients. It was felt this would encourage excess and often unnecessary hospitalization. Members of the special committee pointed out that this was a "trial run" and that the contract or law may be changed. The Defense Department hopes to provide adequate coverage for other than hospital cases at a later date.

The Speaker called for a vote on the amendment to the motion before the house; namely, that the plan be accepted, but as an indemnity plan only. The amendment failed to carry.

D. G. Miller, M.D., moved that the motion before the House be amended to specify that the plan be renegotiated at the earliest possible date to include reasonable home and office care to avoid excess hospitalization. Samuel H. Flowers, M.D., seconded, but upon being put to a vote, the motion failed to carry.

The Speaker then called for a vote on the original motion, which had been made and seconded that the plan as proposed be accepted. The motion carried.

W. E. Becknell, M.D., moved that the president and secretary of KSMA be authorized to sign the contract between KSMA, Kentucky Physicians Mutual and the Department of Defense. Karl D. Winter, M.D., seconded and the motion carried.

The Speaker said it would also be necessary to authorize the appointment of a Review Committee. Doctor Clardy moved the Council be instructed to appoint a review committee. Doctor Winter seconded.

Glen Bryant, M.D., moved that the motion be amended so the Council would be instructed to stagger the appointments to two or three men per year for three-year periods to establish continuity. The Speaker said the size of the review committee would be determined by the Council. Doctor Clardy accepted this amendment, and upon being brought to a vote the motion carried.

The meeting adjourned at 2:43 p.m.

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News Items

Albert T. Hume, M.D., formerly of Temple, Texas, has been appointed manager of Outwood Hospital, Outwood, Ky. He succeeds O. N. Shelton, M.D., who has been transferred to V. A. Hospital, Kerrville, Texas. Doctor Hume received his medical degree from Washington University, St. Louis.

Charles K. Mahaffey, M.D., has assumed the duties of radiologist at Ephraim McDowell Memorial Hospital, Danville. A graduate of the University of Tennessee in 1946, Doctor Mahaffey practiced medicine at McKee from 1947 to 1950, following which time he was a resident in Radiology until he was called to active military duty with the U.S. Air Force.

Willard M. Buttermore, M.D., has announced the opening of his office at Corbin for the practice of ophthalmatology and otolaryngology. He has practiced his specialty for the past ten years at Harlan. Doctor Buttermore is a graduate of the University of Tennessee College of Medicine in the Class of 1939.

George C. Leachman, M.D., 80, Louisville, has retired after six decades of practice, the last 46 as a surgeon. Dr. Leachman delivered his first baby at the age of 15, when he was studying medicine in the office of his physician father. He was graduated from the old Kentucky school of Medicine in Louisville in 1896. For 55 years he has been club physician for the Louisville Colonels baseball team.

Leslie H. Wright, M.D., former chief medical officer and manager of several Veterans Administration hospitals, has been appointed to succeed Richard S. Ahrens, M.D., as superintendent of Kentucky State Hospital at Danville. Dr. Wright has been on the hospital staff since September 1956. The retirement of Dr. Ahrens was effective December 31.

W. S. Allphin, M.D., Georgetown, was recently injured when his car skidded on the ice-covered Dixie Highway about two miles from his home. Taken by a passer-by to Ford Memorial Hospital, Georgetown, for treatment, Dr. Allphin is now convalescing.

Wendell R. Kingsolver, M.D., has returned to Carlisle following two years in the armed forces and has opened his office for practice there. A native of Nicholas County, Dr. Kingsolver graduated from the University of Michigan Medical School in 1952.

H. V. Usher, M.D., who served temporarily at the Graves County Health Department until a replacement was named for the late J. A. Outland, M.D., has returned to his private practice in Mayfield.

Lt. Col. Emerson B. Taylor, Medical Service Corps., has been given the assignment as controller of the Louisville Medical Depot. Dr. Taylor, a native of Seattle, Wash., succeeds Major Richard Greer, now serving in Tokyo.

C. Dwight Townes, M.D., Louisville, will be a guest speaker at the 20th annual meeting of The New Orleans Graduate Medical Assembly to be held March 11-14. The Assembly is sponsoring a postclinical tour to the Mediterranean and Europe following the New Orleans meeting.

PERTINENT PARAGRAPHS

The Horvey Tercentenary Congress, June 3-7, 1957, will be commemorated by an International Congress on the Circulation. The Congress honors William Harvey (1578-1657) who discovered the circulation of the blood. Leading physicians from nine countries will be featured on the program, including the following from the United States: Drs. F. A. Willius, Mayo Clinic; J. Fulton, Yale University; L. Katz, Chicago; C. S. Beck, Cleveland; D. E. Gregg, Washington; A. Courmand, New York; S. Kety, National Institute of Health, Bethesda; and S. E. Bradley, New York.

Medical Education Week, April 21-27, will feature achievements of U. S. medical schools. Sponsoring organizations have prepared activity program formats for state and local medical societies to be distributed this month.

Household protection from mislabeled chemicals is being sought by the A.M.A. Its Committee on Toxicology is studying state labeling regulations with the idea of developing legislation on the precautionary labeling of various chemical products, including paints and paint removers, heating and cooking fuels, household polishers and cleansers, laundering items, etc., not presently regulated.

The Harvard School of Public Health will grant scholarships for the Academic Year 1957-58 to individuals of high professional promise in awards ranging from

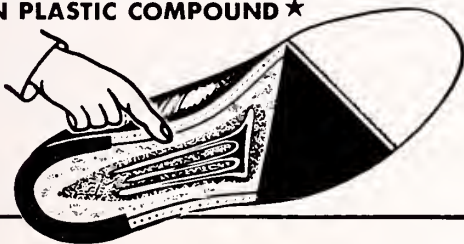
part tuition to tuition plus a stipend, according to the qualifications and financial needs of the applicants. The Scholarship Funds are limited and primarily intended for U. S. citizens. For further information, write to the: Secretary of Admissions and Scholarships, Harvard School of Public Health, 55 Shattuck St., Boston 15.

Humpty, Dumpty, Jock and Jill and other nursery rhyme characters will go on local television stations this year to bring worthwhile health information to the American people. The AMA's Bureau of Health Education is experimenting with animated film cartoons to feature safety, first aid, food preservation, immunization, cold prevention, nutrition, and long life. Each 22-second film ends with "This is a health message from Blank County Medical Society and the American Medical Association."

A \$6,600 research grant to the University of Louisville physics department from the National Science Foundation, has been announced by U. L. President Philip Davidson. The grant provides for a two-year study to discover a way to extend the number of chemicals in the human body that might be used in diagnosing and treating diseases.

The Public Health Service has announced the presentation of 44 five-year fellowship awards to scientists in 29 universities and medical schools. The awards are the first in a new Federal program to increase manpower for research in the basic medical sciences. None of the 44 recipients are from Kentucky.

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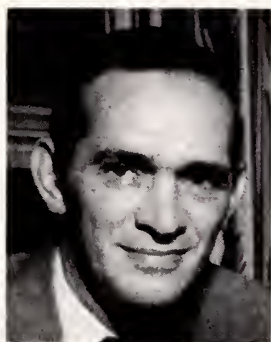
In Memoriam

CHARLES HUGH MAGUIRE, M.D.

Louisville

1910-1956

A Louisville surgeon, Doctor Maguire, 47, was stricken fatally with a heart attack on November 23 while performing an operation at St. Joseph Infirmary in Louisville. Associates tried for 25 minutes to revive him with heart massage.



A native of Jacksonville, Fla., Doctor Maguire was reared at Williamsburg, Ky. He received his medical education at the University of Louisville Medical School where he graduated in 1936. Doctor Maguire was a professor of surgery at the medical school and former chief of surgery at St. Joseph Infirmary.

CARL E. ABELL, M.D.

Louisville

1889-1956

Doctor Abell, 67, a retired physician, died December 22 at St. Joseph Infirmary, Louisville. He practiced at Harlan from 1920 until 1941, when he retired and moved to Louisville following a heart attack.

Doctor Abell was a native Missourian. He received his medical training at the University of Louisville Medical Department, graduating in the Class of 1916. He served in the Army Medical Corps in Europe during World War I before going to Harlan.

WILLIAM M. DWYER, SR., M.D.

Louisville

1882-1956

A Louisville physician for nearly fifty years, Doctor Dwyer died of a kidney ailment at SS. Mary and Elizabeth Hospital December 22.

Doctor Dwyer was a native of Cannelton, Ind. He came to Louisville in 1902. His medical training was received from the University of Louisville Medical Department. Immediately following his graduation in 1906 he began his practice in Louisville's West End area. Doctor Dwyer retired from active practice last year.

CLINTON W. KELLY, JR., M.D.

Louisville

1886-1956

An eye, ear, nose and throat specialist in Louisville since 1914, Doctor Kelly died November 15 after a long illness.

He was graduated from the University of Louisville Medical Department in 1909. Doctor Kelly was 70 years of age.

FRANK C. BOHANNAN, M.D.

Louisville

1895-1956

Doctor Bohannan, a former Louisville physician, died November 20 at his home in New Mexico. He was 61.

Formerly active in sports, Doctor Bohannan once served as boxing commissioner of Kentucky and was physician for the State Athletic Board of Control and for St. Xavier High School athletic teams. He moved from Louisville to New Mexico in 1935. Doctor Bohannan was graduated from the University of Louisville Medical Department in 1919.

ERNST H. KOCH, M.D.

Louisville

1878-1956

A general practitioner in Louisville for 55 years, Doctor Koch, 78, died December 3 of a skull fracture resulting from a fall.

Doctor Koch started his practice in Louisville in 1901, a year after he was graduated from the Louisville Medical Department in 1901. He once served on the staffs of St. Anthony Hospital and SS. Mary and Elizabeth Hospital.

J. E. HUNTER, M.D.

Lexington

1863-1956

Doctor Hunter died November 14 at the home of a son at Dayton, Ohio. He practiced medicine in Lexington 63 years.

Doctor Hunter was the first Negro surgeon to perform major operations in Lexington. He was a charter member and first president of the National Medical Association, Negro professional group similar to the American Medical Association. He received his medical degree at Western Reserve University in 1889.

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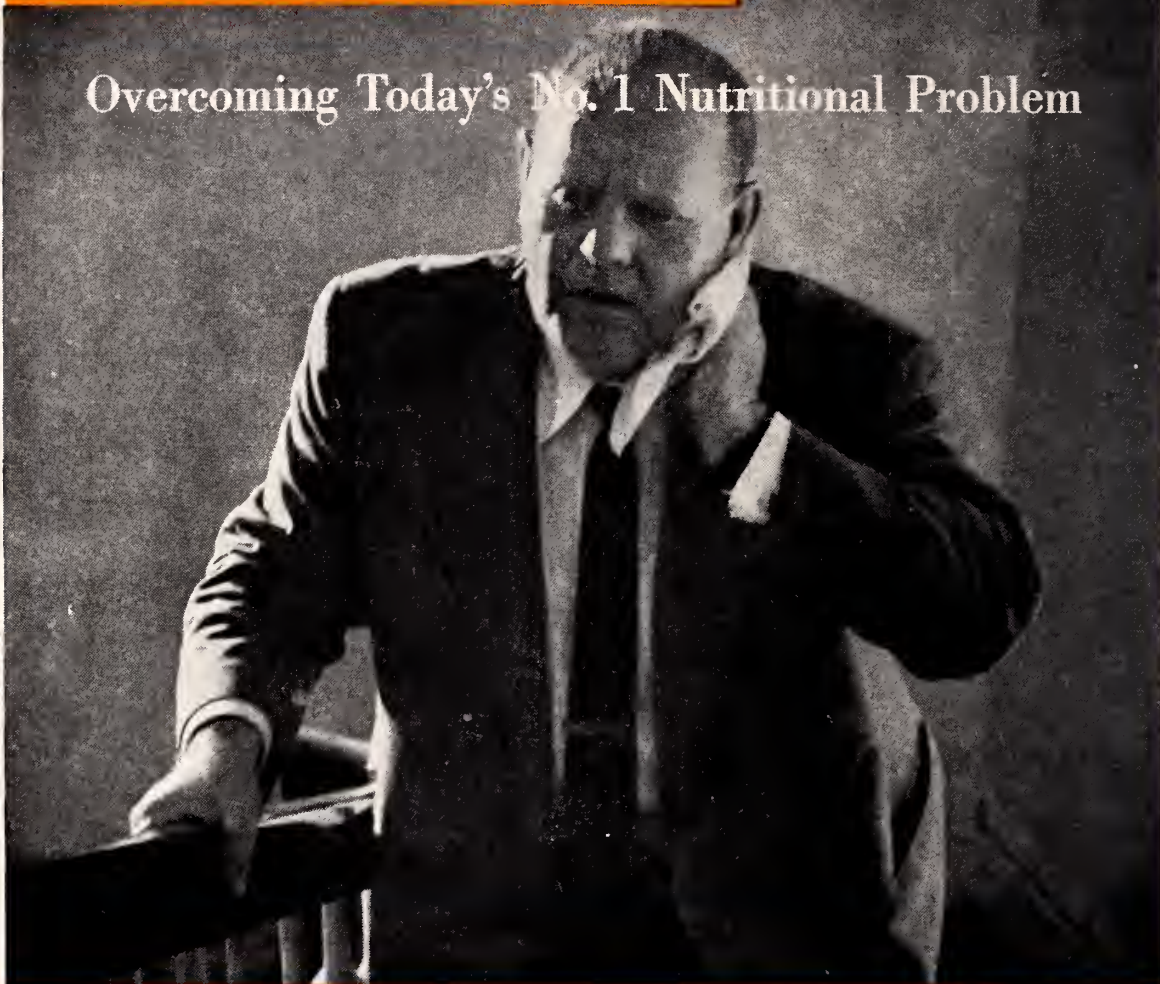
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County Society Reports

Fayette County

The regular meeting of the Fayette County Medical Society was held on Tuesday, October 9, 1956 in the Auditorium of the Good Samaritan Hospital.

The meeting was called to order at 7:40 p.m. by the president, John Sprague, M.D. Minutes of the September meeting were read and approved.

Dr. Sprague recognized John S. Chambers, M.D., who introduced W. R. Willard, M.D., Dean of the Medical School at the University of Kentucky. Dr. Willard spoke briefly about plans for the medical school, courses to be offered, faculty to be appointed and relationship between the school and practicing physicians of Fayette County.

John Guy Miller, field representative of the KSMA was introduced.

C. E. Rankin, M.D., presented the case of a 52 year old white male who had been referred to the vascular center at Houston following diagnosis and treatment here. X-rays were shown. James R. Freedman, M.D., presented the paper of the evening, entitled "Hydatidiform Mole with Metastases."

The applications of C. N. Kavanaugh, Jr., M.D., George Hamm, M.D., and Robert C. Riggs, M.D., were voted upon and they were elected to membership. A. B. Barrett reported for the Insurance Committee on the forum recently held in Louisville.

Nominating committees for selection of candidates for offices of the Society for the coming year were elected, and included the following physicians: N. L. Bosworth, chairman, W. T. Swartz and Carl Wheeler; J. S. Sprague, Chairman, J. F. Van Meter and T. R. Bryant, Jr.

Irving F. Kanner, M.D., reported that the TB Association plans to give the annual tuberculin tests in November. A letter from Adam Miller, M.D., was read expressing appreciation for the cooperation of the doctors during the recent chest X-ray survey. A letter from the State Department of Health was read concerning the two-year appointment to the Fayette County Board of Health of Charles A. Vance, M.D., John Harvey, M.D., and Richard Elliott, MD.

The meeting was adjourned at 9:20 p.m.

T. R. Bryant, Jr., M.D., Secretary

McCracken

The McCracken County Medical Society held its regular monthly meeting on October 24, 1956, with Harold Priddle, M.D., presiding.

William L. Willard, M.D., dean of the U. of Ky. Medical School, gave an interesting discussion concerning future plans of the new medical school at Lexington. There was a prolonged question and answer period.

Theodore Koss, M.D., and Louis Myre, M.D., were approved by the Credentials Committee and Ben Bradford, M.D. moved they be admitted to the McCracken County Medical Society. This was passed unanimously.

A member of the Heart Clinic Committee stated the

committee was to meet within a few days and reach a final decision regarding the proposed Heart Clinic.

The meeting was adjourned at 9:45 p.m.

C. P. Orr, M.D., Secretary

Perry

The monthly meeting of the Perry County Medical Society was held on November 12, 1956 in the Perry County Health Department with E. C. Boggs, M.D., president, presiding.

Plans for the 50th anniversary of the Society were discussed briefly, however no definite program was set at this time.

C. C. Rutledge, M.D., delegate to the KSMA, gave a very good report on the KSMA meeting.

A guest speaker was selected for the Annual Ladies Night Banquet, Dec. 10, 1956. He is Albert Di Lun, medical director of the Nam Kham Hospital in Burma, also an associate of Gordon Seagrave, M.D., the famous Burma Surgeon. Doctor Di Lun is doing post-graduate study in several large medical centers in the U. S. under the direction of the American Baptist Foreign Missionaries Society.

T. H. Biggs, M.D., director of the TB Sanatorium at London was guest speaker and showed several chest X-ray films on unusual cases of TB diagnosis, and differentiation from Histoplasmosis.

R. F. Johnson, M.D.

Pike

The monthly meeting of the Pike County Medical Society was held at Langley's Cafe on October 16, 1956, at 6:30 P.M. with eighteen members and two guests present. F. H. Hodges, M.D., president, presided.

The need for amending the Constitution and By-Laws in regard to conditional membership was discussed and W. C. Hambley, M.D., was appointed as a committee of one to amend Chapter I, Section II, of the Constitution. The proposed amendment to be voted upon at the next meeting.

A committee was appointed by Dr. Hodges to investigate the salaried and contract arrangements existing in our Society in relationship to their compliance with the Pike County Medical Society Constitution and By-Laws. T. I. Doty, M.D., R. H. Davis, M.D., and W. F. Clarke, M.D., were appointed to this committee.

G. N. Combs, M.D., B. W. Cassady, M.D., and Doctors Clarke, Davis and Hambley volunteered to aid in the American Cancer Society Program for lay education.

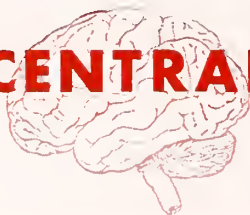
The Society voted that all contributions to the Crippled Children's Program could best be handled on an individual basis.

A very interesting and informative paper on the diagnosis and treatment of coronary artery disease was read by Cordell Williams, M.D., of the Hazard Clinic.

A new application for membership to the Society

(Continued on Page 88)

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County Society Reports (Cont.)

was discussed at length and the Society elected to vote against admission of the applicant to the Society.

Meeting adjourned on motion.

Ballard W. Cassady, M.D., Secretary-Treasurer

Scott

The Scott County Medical Society held its regular meeting on Thursday, Nov. 1, 1956 at the John Graves Ford Memorial Hospital in Georgetown.

Tom Yocum, M.D., Lexington, was guest speaker. His subject was the treatment of Common Fractures of the Upper Extremities.

James C. Cantrill, M.D., urged all physicians to cooperate with the Diabetic Drive the week of Nov. 11-17, and get as many specimens as possible.

Members present included the following physicians: W. S. Allphin, C. R. Lewis, F. W. Wilt, H. G. Wells, A. F. Smith, H. V. Johnson and Doctor Cantrill.

H. V. Johnson, M.D., Secretary

Scott

The annual election of officers for the Scott County Medical Society was held at the regular monthly meeting on Dec. 6 at the John Graves Ford Memorial Hospital at Georgetown.

Officers elected included the following physicians:

W. S. Allphin, president; H. V. Johnson, vice-president; J. C. Cantrill, secretary and treasurer; H. G. Wells, delegate; C. R. Lewis, alternate; A. F. Smith, censor, three years.

A motion was made, seconded and carried to raise county dues to \$7 per year.

The following members were present: Drs. Cantrill, Lewis, Smith, Wells, Johnson, and F. W. Wilt, M.D.

H. V. Johnson, M.D., Secretary

Shelby-Oldham

The Shelby-Oldham County Medical Society held its October meeting at Stone Inn, Simpsonville, with 26 members in attendance.

The guest essayist at this dinner-meeting was Robert Akins, M.D., Louisville, whose subject was "X-Ray Studies of the Esophagus and Stomach."

C. C. Risk, DDS., Secretary

Shelby-Oldham

The November meeting of the Shelby-Oldham County Medical Society was held at Stone Inn, Simpsonville, on November 15.

This dinner-meeting was attended by 61 members and guests.

Following the dinner, the Women's Auxiliary presented a musical program.

No important business was transacted.

C. C. Risk, DDS, Secretary

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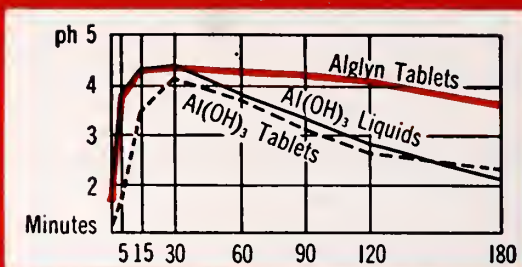
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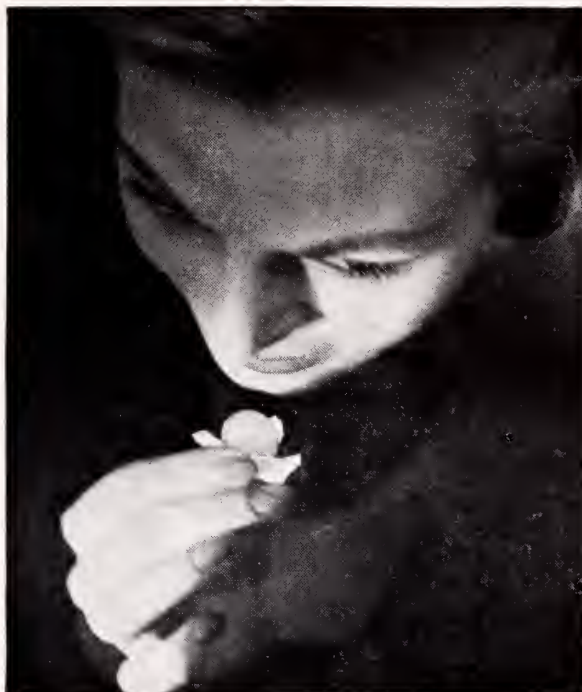


1. Rossett, N.E. and Rice, M.L., Jr.: *Gastroenterology*, 26:490, 1954.
2. Hammarlund, E.R. and Rising, L.W.: *J. Am. Pharm. Assoc., Scientific Edition*, 38:586, 1949.

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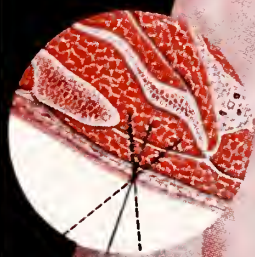


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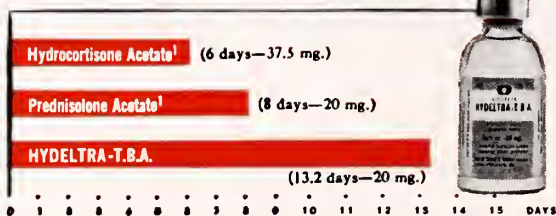
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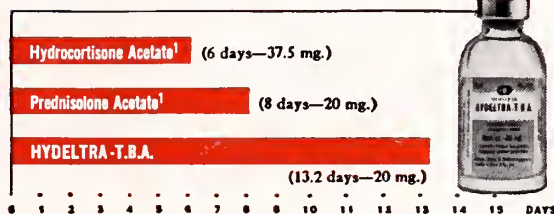
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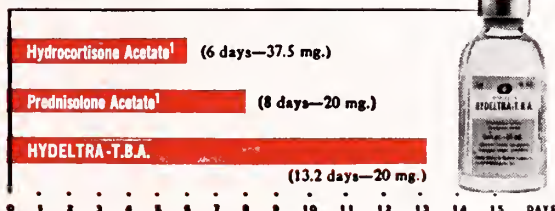
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Frozen shoulder
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syndrome
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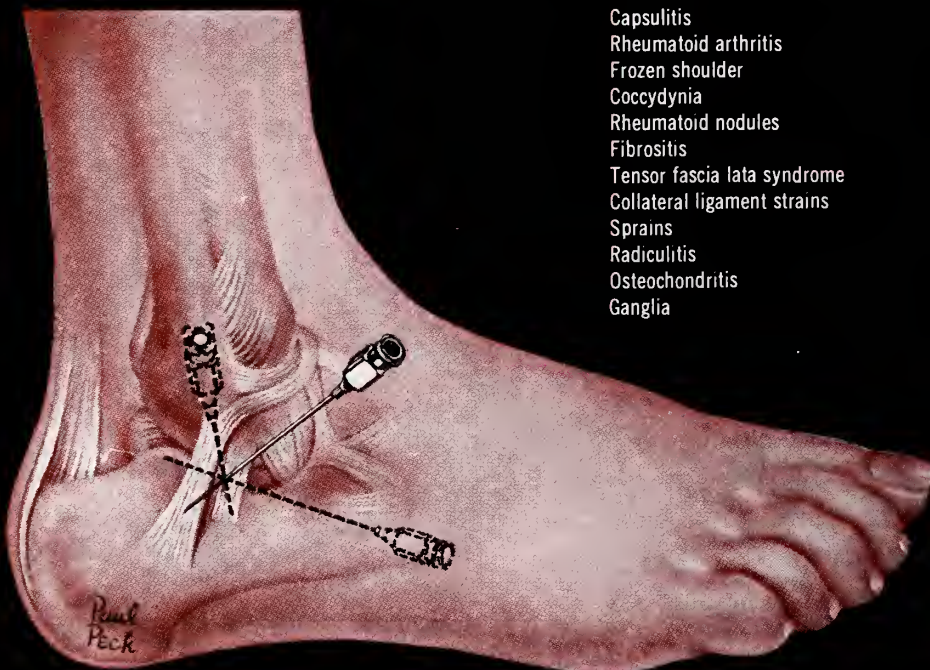
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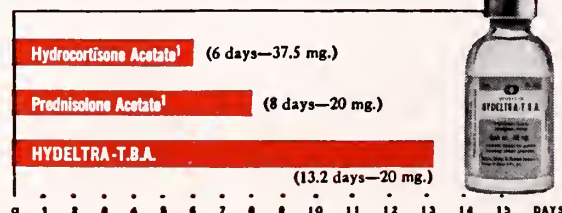
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*Ferguson, J. T.: J. Am. Geriatrics Soc. 4:1080, 1956.



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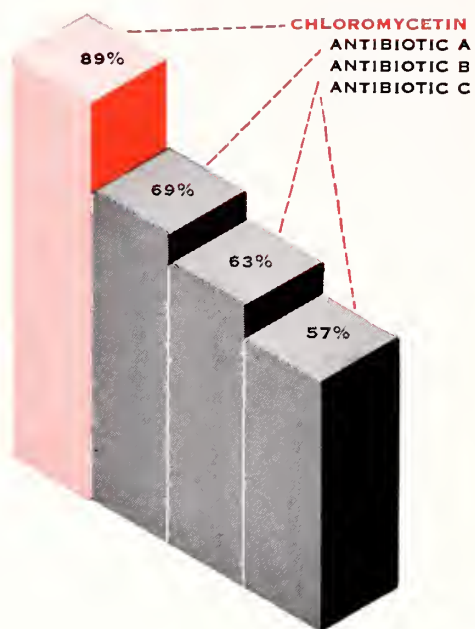


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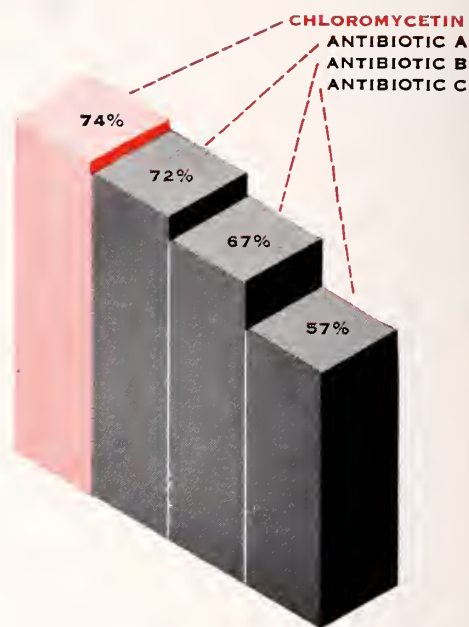
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Salicylate Intoxication

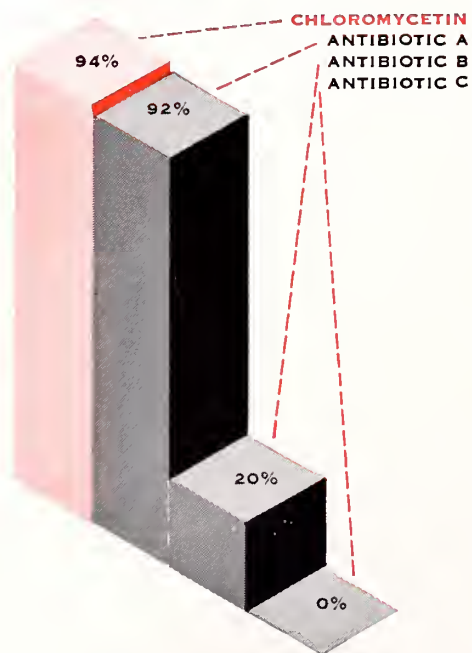
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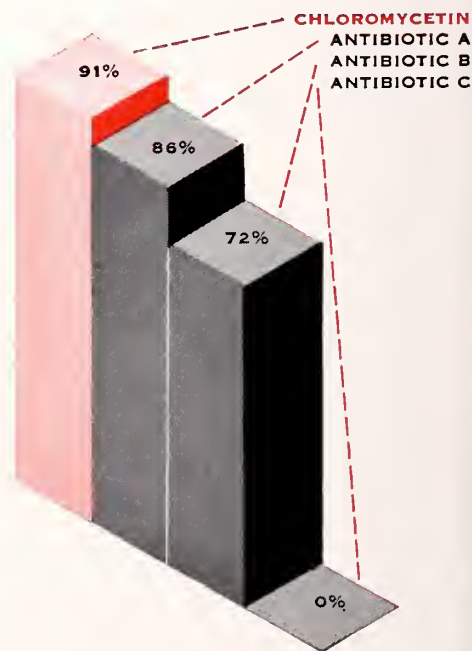
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References (1) Altemeier, W. A.; Culbertson, W. R.; Sherman, R.; Cole, W.; Elstun, W., & Fultz, C. T.: *J.A.M.A.* 157:305 (Jan. 22) 1955. (2) Austrian, R.: *New York J. Med.* 55:2475 (Sept. 1) 1955. (3) Murphy, F. D., & Waisbren, B. A., in Murphy, F. D.: *Medical Emergencies: Diagnosis and Treatment*, ed. 5, Philadelphia, F. A. Davis Company, 1955, p. 557. (4) Weil, A. J., & Stempel, B.: *Antibiotic Med.* 1:319, 1955. (5) Jones, C. P.; Carter, B.; Thomas, W. L., & Creadick, R. N.: *Obst. & Gynec.* 5:365, 1955. (6) Kass, E. H.: *Am. J. Med.* 18:764, 1955. (7) Tebrock, H. E., & Young, W. N.: *New York J. Med.* 55:1159 (Apr. 15) 1955.

This graph is adapted from Altemeier, Culbertson, Sherman, Cole, Elstun, & Fultz.¹



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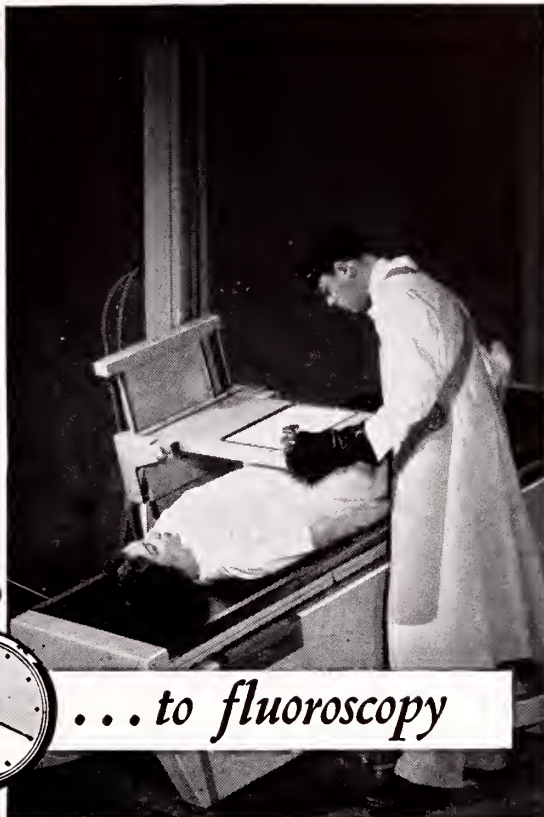
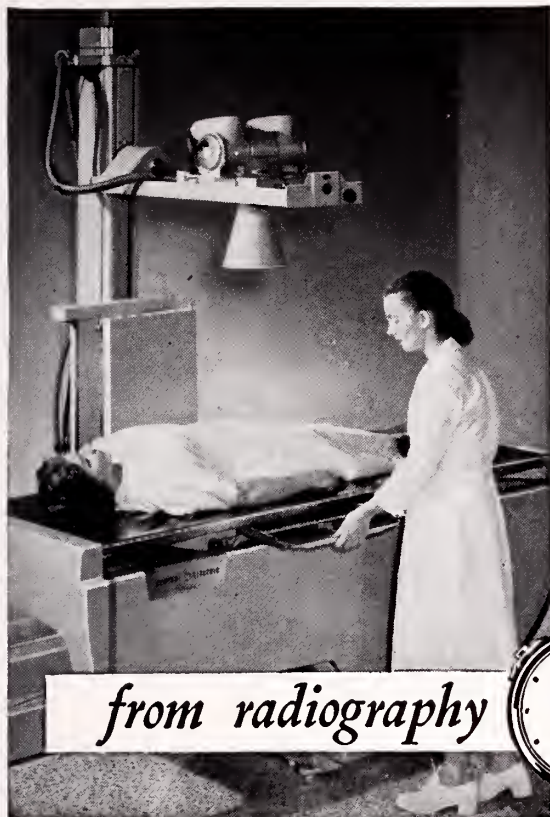
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Erythromycin in Treating Pneumonia

A 27-year-old man, a chronic alcoholic, was admitted with a history of an alcoholic spree followed by a cough, greenish sputum and chills and fever.

Physical examination showed a temperature of 104 F. and indicated pneumonia in the right lower lobe. This was confirmed by X-ray. The sputum revealed gram-positive diplococci and blood culture subsequently grew Type VII pneumococci.

The patient was treated with erythromycin, 300 mg. every six hours per os. His temperature dropped to normal by 48 hours and X-ray of the chest revealed considerable clearing by the fourth hospital day. After 10 days hospitalization, the patient was fit for discharge.¹

First Antibiotics Symposium, we reported the successful treatment with erythromycin of *H. influenzae* pneumonia and bacteremia. A second patient with *H. influenzae* pneumonia and bacteremia had a clinical course almost identical to the one previously reported, with cure obtained by treatment with 500 mg. of erythromycin per os every four hours for 14 days.

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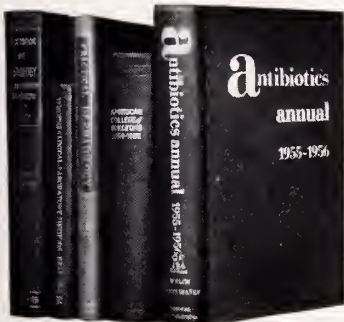
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1. Romansky, M.J., et al., *Antibiotics Annual 1955-1956*, p. 48,
2. Waddington, W. S., Maple, F. C., and Kirby, W. M. M., *A.M.A. Archives of Internal Medicine*, 1954, p. 556.



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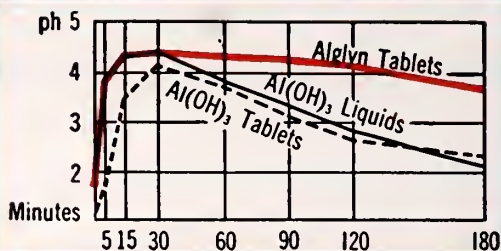
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1. Rossett, N.E. and Rice, M.L., Jr.: *Gastroenterology*, 26:490, 1954.
2. Hammarlund, E.R. and Rising, L.W.: *J. Am. Pharm. Assoc., Scientific Edition*, 38:586, 1949.

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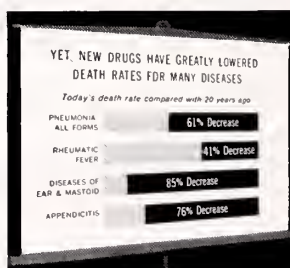
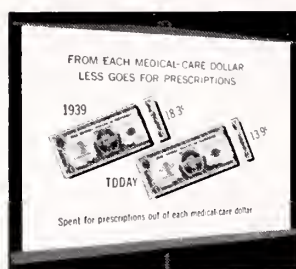
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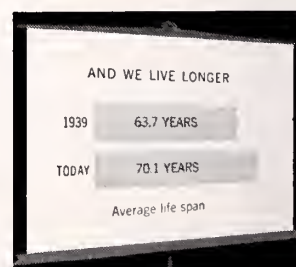
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President**

KSMA members, we urge you to make the National Conference on Rural Health, March 7-9, a MUST on your calendar. It is vital to the leadership we have assumed in sponsoring rural health programs in Kentucky and promoting National Conference plans that large numbers of doctors from all over the State show active interest in its success.

Kentuckians, especially those in rural areas, stand to benefit greatly from the enthusiasm for health improvement that will be engendered at the three-day meet. Car pools are being planned in every county to bring health-conscious citizens to this AMA sponsored program.

Conference attendants will include farming groups, extension workers, rural leaders of religious and educational affiliation, and medical, dental, nursing, pharmaceutical and hospital personnel. With leading Kentucky citizenry thus seeking a solution to its rural problems, the well-planned conference program is bound to find fertile soil.

Kentucky is a rural state. The problems of the farmer in the remotest section concern all of us. Our state health standard is only as strong as the need of our weakest area. Needs are all around us—doctors, hospital facilities, health departments, preventive and safety measures, health insurance expansion, and mobilization of community talent for education and action.

A basic part of the Rural Health Council's philosophy is the conviction that when people through their own choosing get together for co-operative effort, community health hindrances are erased. The Kentucky medical profession is in the privileged position of being able to encourage and serve local communities seeking solutions to their problems, in which we are qualified to assist.

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PUBLIC HEALTH PAGE

RUSSELL E. TEAGUE, M.D.

Commissioner of Health

State of Kentucky

In the past 20 years we have seen great advancements in diagnostic, surgical and therapeutic techniques. The average life span has been lengthened, resulting in a greater number of old people. With them has come a greater incidence of cancer, heart disease and other chronic disorders.

All these things have resulted in a greater demand upon the community's hospital facilities. To the physician of today the hospital must be more than just a place for his patients to recuperate from illness or accidents; it must provide him with diagnostic aids and specialized facilities and equipment for surgery and therapy. Greater longevity and an increasing birth rate add up to a larger population and a greater demand for hospital facilities. And although the increased incidence of chronic diseases has been countered by improved methods of treating them, their treatment frequently requires hospitalization, making even greater the need for more hospitals.

In recent years Kentucky's hospital and medical facilities have been greatly expanded to meet this need. In 1946 Congress enacted Public Law 725, the Hospital Survey and Construction Act, popularly known as the Hill-Burton Act. This law and Public Law 482, the Medical Facilities Survey and Construction Act of 1954, provide funds, on a matching basis, to states for planning and constructing hospitals, diagnostic and diagnostic treatment centers, rehabilitation centers, schools of nursing, nursing homes, and health centers. These funds are disbursed in Kentucky by the Division of Hospital and Medical Facilities of the State Department of Health.

Under the provisions of these laws, 30 new hospitals and 25 additions to existing hospitals have been completed at a total cost of nearly \$37,000,000.00. In addition, there have been completed a steam plant for the Medical Center in Louisville, a laboratory for the State Department of Health, and 31 health centers.

The hospital and medical facilities construction program shows no sign of letting up. In the past 18 months there has been much progress, as indicated by the following summary.

1. Construction of the following facilities has been completed and each has been put in operation:

Carroll County Memorial Hospital
Sewage Disposal System for Nicholas County Hospital

Addition to Clinton and Hickman County Hospital

2. Construction begun of new SS. Mary and Elizabeth Hospital, School of Nursing, and Nursing Home.

3. Contracts awarded and construction begun on additions to two general hospitals, in Covington and Frankfort.

4. Plans and specifications for Estill County Hospital have been completed, Part 4 of the Application approved, and bids taken but actual construction has not begun.

5. Plans are being drawn for:

New Hospitals: Methodist-Evangelical Hospital, Louisville; St. Joseph Hospital, Lexington; and Knox County Hospital, Barbourville.

Additions to: Hopkins County Hospital, Madisonville; Jennie Stuart Memorial Hospital, Hopkinsville; Louisville General Hospital, Louisville; Methodist Hospital in Henderson; Pineville Community Hospital, Pineville; Our Lady of Mercy Hospital, Owensboro; Owensboro-Davies County Hospital, Owensboro; St. Elizabeth Hospital, Covington; and Our Lady of Peace Hospital, Louisville.

Additions to Existing Schools of Nursing: Norton Memorial Infirmary, Louisville, and King's Daughters' Hospital, Ashland.

6. Five health centers have been completed

(Continued on Page 183)

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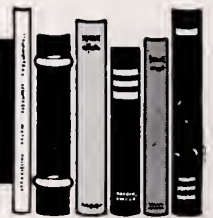
and "... often useful in the treatment of infections due to staphylococci resistant to one or several of the regularly used antibiotics"

"side effects . . . [are] notable by their absence"¹

1. Carter, C. H., and Maley, M. C.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 51.



IN THE BOOKS



PRACTICAL PEDIATRIC DERMATOLOGY: by Morris Leider, M.D. D. Published by C. V. Mosby Co., 1956, 433 pages, 280 photographs, 13 drawings.

Many years ago, Dr. Lewis H. Hill, the pediatrician, and Dr. Marion B. Sulzberger, the dermatologist (who wrote the foreword to this splendid book) in an article on atopic dermatitis wrote that, "the infant is not just a little man, he is quite another kind of little man."

In his recently published book, "Practical Pediatric Dermatology," Dr. Leider proceeds to prove his point. After a concise and well written chapter on the "Basic Science Aspects of Dermatology," stressing differences between the skin of the child and that of the adult, the principles of dermatologic diagnosis and therapeutics are considered.

Of particular interest and importance is the Annotated Formulary with detailed descriptions of the actions of drugs, in what bases one should incorporate which active ingredients. The methods of application of these medications with directions that can be understood by the lay person using the preparation on the child are carefully explained. More detail has been given to the nursing and medicating of the skin than most dermatology texts contain.

The remainder of the book in larger measure discusses specific diseases, separated into groups, insofar as possible, according to their etiologic background. The entire text is replete with excellent tables, summarizing material in the text itself, in a succinct, readable, practical form.

Naturally, a limited text of this type takes certain short cuts necessitated by lack of space. E.g., Dr. Leider's discussion of urticaria mentions only very superficially neurogenic or psychogenic etiologic factors. Again, although his chapter on hereditary and congenital processes is quite complete, he only mentions the mode of inheritance under one of the many conditions he discusses (viz., albinism) and then leaves the erroneous impression it is inherited only as a Mendelian dominant characteristic.

However, throughout this excellently organized book, the practical aspects of pediatric dermatology are always kept in view and this text is highly recommended as a useful and valuable one for the busy general practitioner or pediatrician.

M. T. Fliegelman, M.D.

* **THE NEUROSES IN CLINICAL PRACTICE:** by Henry P. Laughlin, M.D. Published by W. B. Saunders Company, 1956; 802 pages, price \$12.50.

In this book Dr. Laughlin presents an interesting and comprehensive discussion of the neuroses. Opening with a discussion of anxiety, he follows eclectic concepts with clear definitions and excellent comparisons to "normal" or average experiences. He departs

from the usual textbook approach in taking up the clinical entities of anxiety reactions in the second chapter while his general discussion of the problems of anxiety remain fresh in one's mind. Then before considering other clinical entities he discusses the mechanisms of defense which are important to any clear understanding of psychological theories of the neuroses.

The remainder of the book is devoted to specific neurotic entities or syndromes. Dr. Laughlin deviates from the standard nomenclature adopted by the American Psychiatric Association. Although his classification is clear and easy to follow one wonders if it is wise to add to the confusion about classification, and if he should have adapted his concepts to classification already in use for a text of this type. On the other hand his concepts such as "over concern with health, fatigue states, and neuroses following trauma" are quite useful.

Concerning treatment, Dr. Laughlin limits himself almost entirely to psychotherapy. He does not overlook the role of electroshock treatment in depressions, but does point out that he has given this up in his own practice. Although it is hard to present a method or methods of psychotherapy in a textbook, he gives an excellent discussion of basic attitudes, not only concerning psychotherapy, but also concerning the psychiatric referral.

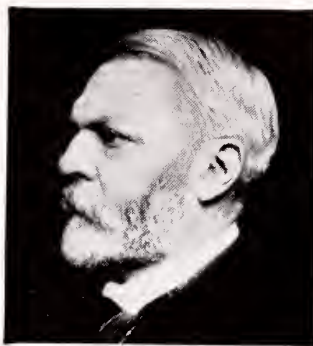
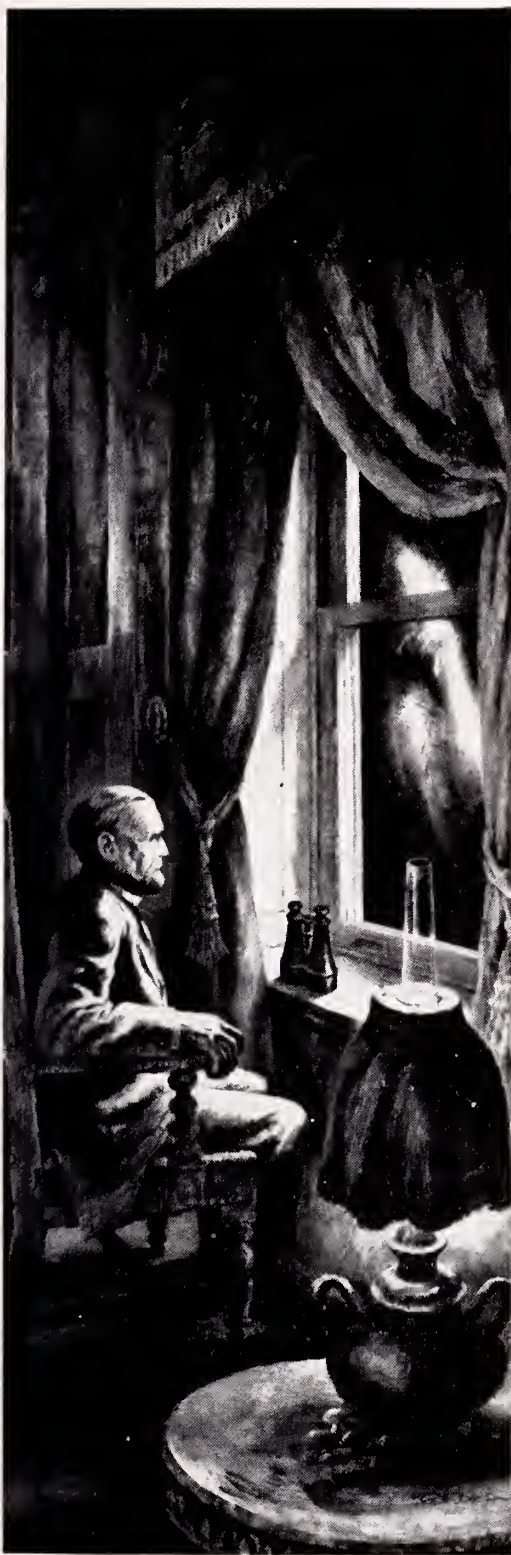
DISEASES OF THE BREAST: Cushman D. Haagensen, M.D. Published by W. B. Saunders Company, 1956, 751 Pages, 404 Figures and 25 Charts. Price: \$16.

This is more than just another book on breast diseases. The author, a man dedicated to the study and treatment of breast conditions, especially cancer, is himself unique. The tremendous accumulation of material represented by this book is the result of twenty-five years of intense personal concentration on breast disease, coupled with an exceptional background of forty years' experience with the problem, in one institution. When one reflects that the Halsted mastectomy for breast cancer is barely sixty years old, the immense value of this carefully collected, and statistically significant compilation of data is apparent.

The book is well written and exceptionally readable. The personality of the author is forcefully transmitted by the use of the first person singular pronoun throughout the text, in description, discussion and critical analysis.

The author's well documented views on the significance of cystic disease and intraductal papilloma in relation to the problem of cancer is most valuable

(Continued on Page 182)



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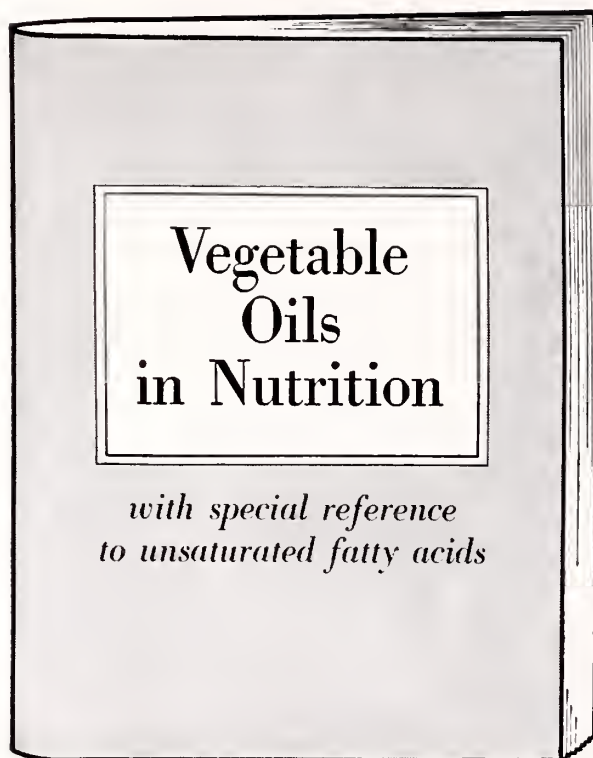


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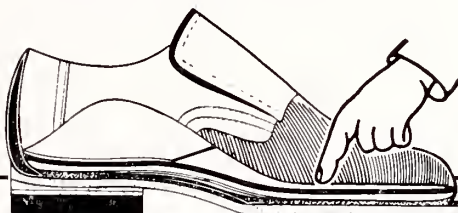
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WASHINGTON NEWS DIGEST



Washington, D. C.—The broad issue of federal construction grants for medical schools pending before the 85th Congress raises again a major question: To what extent is there a physician shortage in the United States?

The administration, through Secretary Folsom, maintains that the need for more doctors and research scientists is increasing rapidly as the population rises, as medical science grows more complex and as research programs are greatly expanded. And, he adds, the need undoubtedly will continue to increase in the years ahead.

Many of these schools already are in a critical financial plight, Mr. Folsom argues, and they need increased private and public funds "just to meet regular operating expenses." Under these circumstances, without further aid, "many schools face almost impossible obstacles in raising funds for construction of new classrooms, laboratories and other facilities." The Secretary then sounds this warning:

"Unless effective action is taken now toward providing these facilities, the shortage of medical scientists will grow much more acute in the years ahead, and the health of the American people will be retarded."

To solve this problem, the administration wants to broaden the program enacted last year for \$30 million a year for three years to help build and equip laboratories doing research in various diseases. It asked the last Congress for \$50 million a year for five years for both research labs and teaching facilities. The legislators only granted the \$30-million-a-year part. That, says the administration, is not enough.

And to bolster that contention, Mr. Folsom cites the record on the lab facilities act: within three months after authorization, requests totalling well over \$100 million were received by the Public Health Service.

But when the committees of Congress—in all likelihood starting with the House Interstate and Foreign Commerce group—launch their hearings, members will want to know just how short the country is of doctors and whether reports of shortages take into account the increased productivity of each physician in the light of new techniques and other medical advances.

On the opening day of the 85th Congress, health legislation emerged as a popular subject. Of the approximately 2,000 bills, resolutions and private measures introduced that day, 70 were marked for study

by the Washington Office of the American Medical Association. Experience has shown that about 3 per cent of all measures are of medical importance.

Many of the bills were duplicates of those in the last Congress, while others were revised versions of old favorites. In the latter category were the Jenkins-Keogh bills (again bearing the numbers H. R. 9 and H. R. 10) which would provide tax deferment on money paid in annuity plans, and the Bricker Amendment for keeping international treaties from affecting internal laws of the U. S.

The tax deferment proposal was changed in several respects, the most important being a provision for withdrawal of money from plans in advance of age 65, upon payment of a tax penalty. The key section in the proposed constitutional amendment sponsored by the Ohio Senator states that "A provision of a treaty or other international agreement not made in pursuance of this Constitution shall have no force or effect."

One of the few surprises in the opening day rush to the bill hoppers was a bill Rep. Poage (D., Tex.) to authorize the Secretary of HEW to make long-term, 3 per cent interest loans to non-profit hospitals for construction and expansion of facilities, including nurses homes. Certain sectarian groups have been pressing for just such a plan in lieu of taking federal grant money under the Hill-Burton program.

Moving to fill two major spots in the Department of HEW, President Eisenhower has named as Assistant Secretary 36-year-old Elliott L. Richardson, a Boston lawyer and son of the late Dr. Edward P. Richardson of Massachusetts General Hospital and Harvard Medical School. Mr. Richardson served at one time as law clerk to Judge Learned Hand and Justice Felix Frankfurter, as assistant to Senator Saltonstall and as consultant to former Gov. Christian Herter, now Under-Secretary of State.

To succeed Dr. Lowell T. Coggeshall as special assistant for health and medical affairs, the President appointed Dr. Aims C. McGuinness, a Philadelphia pediatrician who was last in Washington as a clinical consultant to the United Mine Workers Welfare and Retirement Fund. He was responsible for the medical staffing of the Fund's 10 memorial hospitals in three mining states. Dr. McGuinness was dean of the University of Pennsylvania Graduate School of Medicine and one-time director of Children's Hospital of Philadelphia.

Dr. Coggeshall, who returns to the University of Chicago, was praised by Mr. Folsom for his "splendid work on behalf of the health of the American people."

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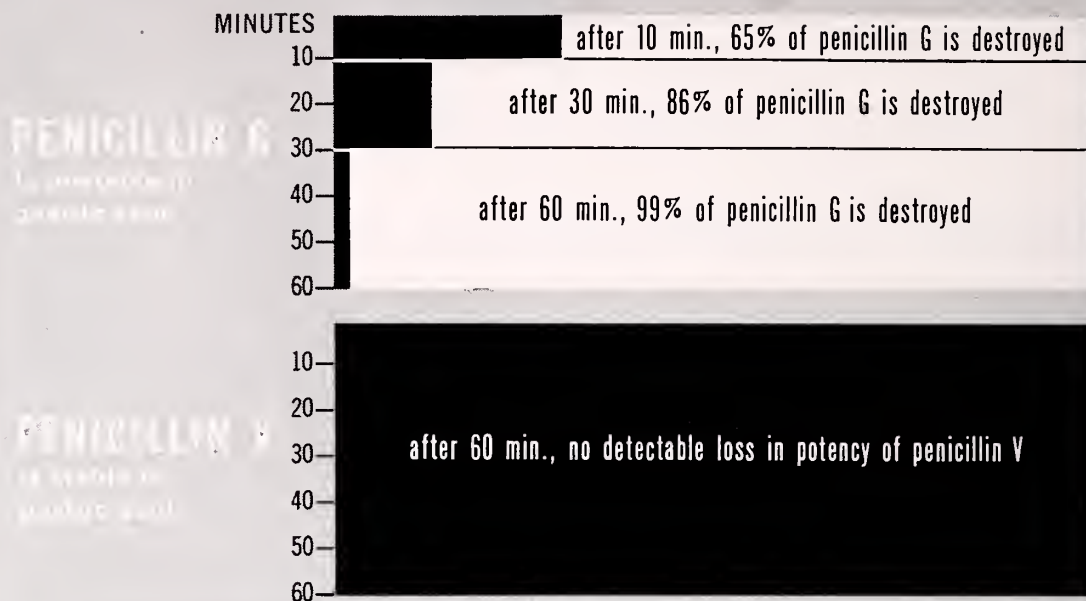
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NO. 2

A NEW FACTOR IN MATERNAL MORTALITY*

HENRY B. TURNER, M.D.

University of Tennessee College of Medicine

Memphis, Tennessee

According to figures supplied by the Department of Health, Education, and Welfare, maternal deaths in the United States have declined 85 per cent in the past 20 years. This is a most amazing record and one of which all of us as physicians may be proud.

The principal causes of maternal death 20 years ago were sepsis, toxemia, and hemorrhage. Today the same three factors account for the great majority of deaths in obstetrics but in different order. The number one obstetric killer today is toxemia, with infection in second place.

The New Problem

As is so often the case, while improvement is being made in one direction a new difficulty appears from another side. So it is with a new factor in maternal mortality which, on our service at the University of Tennessee, now occupies fourth place as the cause of obstetric death. This new factor is almost completely of our own doing. True, we have been pushed in that direction by the demands of our patients but regardless of where the blame is to be placed, we are faced with the fact that our new obstetric killer is anesthesia!

With the reduction of maternal morbidity from other causes such as hemorrhage, infection, and toxemia, the relative number of parturients who die from anesthesia is increasing. The prevailing concept of the relative unimportance of obstetric anesthesia by both the medical and nursing profession is appalling. Too often the responsibility of anesthesia for delivery is delegated to the most recent graduate in the department or, worse still, to someone

completely without training in the administration of anesthetic agents. Errors in the technic of administration and the use of contraindicated agents are the natural results of such inexperience. In some cases, the failure of the person involved to observe such a basic principle as the maintenance of an adequate airway has resulted in the loss of life.

Unfortunately, or otherwise, modern woman has been educated to expect relief of the pains of parturition. It is a fact, however, that in almost all cases successful labor and delivery will occur without maternal medication of any kind! The medical literature reveals few if any cases of women dying from the pain of childbirth. It does reveal, however, numerous reports of those dying from well-meaning attempts to relieve such pain. In those states where maternal mortality studies are made, anesthesia has been found to rank fifth among causes of maternal death. This shocking fact poses a real problem for the medical and the nursing profession.

At last year's annual meeting of the American Academy of Obstetrics and Gynecology in Chicago, Dr. Charles Stevenson of Wayne University, Detroit, presented a most challenging paper on maternal deaths from anesthesia. His data was collected from the State of Michigan for the years 1950 through 1953. During this period there were 515 maternal deaths in that state, of which 34 were the direct or indirect result of anesthesia.

Definition

For purpose of definition he states that an anesthetic death is that which occurs while the

*Presented at 1956 KSMA Annual Meeting.

patient is under the influence of an anesthetic agent, or which results from complications arising from the anesthetic agent or method used.

In some cases it is difficult to ascertain the specific contribution anesthesia makes to death. In others the implication is only too clear. Accordingly, for the purpose of study, five categories were set up as follows:

- I. *Direct* cause of death in a well, good-risk patient.
- II. *Direct precipitating* cause of death in an ill, poor-risk patient.
- III. *Probable* contributing cause of death, with other morbid factors present.
- IV. *Possible* contributing cause of death, with other morbid factors present.
- V. *Probable non-contributory* cause of death, but cannot be so proven.

The findings of Dr. Stevenson in the Michigan study prompted us to review our experience in the Department of Obstetrics at the University of Tennessee. At the City of Memphis Hospitals from 1946 through 1954 there were a total of 79 obstetric deaths. A review of these charts revealed 11 in which anesthesia played the principal or a strong contributing role in the patients' demise.

By way of explanation, it should be stated here that the responsibility of anesthetic administration has fallen almost entirely upon the house staff of the department of obstetrics. This is not ideal but efforts are being made to correct this situation at the present time. The great majority of anesthetics are, of necessity, regional in variety with saddle block being the most common. All too often "token general anesthetics" are administered by interns or residents using nitrous oxide or ethylene for the spontaneous delivery of multiparas. In such situations laryngospasm is occasionally seen and the danger of aspiration of vomitus is omnipresent.

Comparison of Findings

So that our experience might be compared to that of Michigan, tables have been prepared and our cases placed in the various categories suggested by Stevenson. Table 1. reveals that our incidence of anesthetic fatality is twice that of the State of Michigan. A comparison of the two groups may not be justified, however, when one considers that the Michigan series is a heterogeneous one including rural and urban deliveries with wide variation in obstetric and

anesthetic experience. On the other hand ours occurred in a large charity hospital, staffed by University personnel, where obstetric complications of extreme degree are encountered.

Table 1.

	Total Obstetric Deaths	Anesthetic Deaths	Per Cent
Michigan 1950-1953	515	34	6.6
Memphis 1946-1955	79	11	13.9

The two groups may be compared further by classifying each according to the degree of responsibility of anesthesia in the maternal death. Table 2. reveals that in each study the greatest number of deaths fall in category I. This is most distressing, for probably all of those women would have survived had no anesthetic been administered. The use of local anesthesia would have resulted in adequate pain relief and probably spared the patients' lives. Stevenson, however, reports one case in which Adrenalin,[®] instead of procaine, was injected for pudendal block with the fairly prompt death of the patient. Local anesthesia is not entirely benign in itself, therefore, and may be lethal by virtue of gross error as in the above case or by marked sensitivity to the drug.

Table 2.

Group	Michigan	Memphis
I.	24	5
II.	5	1
III.	2	1
IV.	2	3
V.	1	1

Finally, it would be interesting to see how deaths from anesthesia compare with other causes on our own service. In this tabulation only the primary cause of death was considered. Six of the 11 anesthetic deaths were so considered. As seen in Table 3, toxemia is our greatest killer with death from hemorrhage in second place. Anesthesia is the fourth most frequent cause of death in our series, accounting for 7.6 per cent of deaths in obstetrics at the City of Memphis Hospitals.

Table 3.

	Cases	Per Cent
Toxemia	33	41.7
Hemorrhage	23	29.1
Infection	8	10.2
Anesthesia	6	7.6
Heart Disease	4	5.0
Carcinoma	1	1.3
Miscellaneous	4	5.0

For purpose of comparison, the records of the Baptist Memorial Hospital for the years 1947 through 1955 have been studied. This hospital in contrast to the City of Memphis Hospital is an all white, almost 95 per cent private service institution.

During the 9 years surveyed there were on the obstetric service a total of 22,086 live births. There were 11 maternal deaths for a mortality rate of 0.5 per 1000. All deaths occurred on the private service. The causes of death are given in Table 4.

Table 4.

	Cases	Per Cent	
Hemorrhage	6	54.5	(3 lower nephron nephrosis)
Toxemia	1	9.1	
Infection	1	9.1	
Miscellaneous	3	27.3	(1 embolus, 1 brain tumor, 1 Hodgkin's disease)

There were no anesthetic deaths. The department of anesthesia at the Baptist Hospital is under the direction of 2 extremely well qualified anesthesiologists. They employ a group of from 10 to 12 nurse anesthetists at least 1 or 2 of whom are on obstetric call day and night.

Analysis of Case Histories

Perhaps a more detailed analysis of some of the case histories would be of interest. Of the 5 deaths in group I, 3 were regional anesthetics, 1 general, and 1 patient was given a variety of agents.

The first patient was a 25 year old gravida 2, para 2 with previous history of rheumatic heart disease. Repeat Caesarean section was started under Pontocaine® spinal anesthesia. Sixteen minutes later cardiac arrest suddenly occurred but heart action was restored by thoracotomy and cardiac massage. A living male infant was delivered but the mother expired 5 days later of sepsis apparently secondary to the chest surgery.

The second patient was operated on for a ruptured tubal pregnancy. Anesthesia was cyclopropane, nitrous oxide and ether given by a nurse anesthetist. Cardiac arrest occurred suddenly after 31 minutes of anesthesia with death 4 minutes later.

One of the most tragic errors in technic occurred in the case of a normal 20 year old

gravida 2. Caudal analgesia was instituted for delivery. The injection of the usual initial dose of 30 c. c. of Metycaine® resulted in an unrecognized sub-arachnoid block. Skin analgesia was detectable to the highest cervical segment. Respiratory arrest followed and all attempts at resuscitation were to no avail. Autopsy revealed an abnormally low lying dura.

A tragedy of errors resulted in the death of the fourth patient, a 16 year old primigravida. Metycaine was given as a saddle block anesthesia without effect. Nupercaine® was then given with satisfactory pain relief but labor ceased at 7 centimeters dilatation. Five hours later labor had resumed and the cervix was completely dilated. Nupercaine was again given as saddle block which sufficed for delivery but was supplemented with ethylene-oxygen for closure of the episiotomy. Soon thereafter blood pressure rose to 190/120 and then suddenly fell. Rupture of a viscus or intra-abdominal bleeding was suspected. Laparotomy was carried out under nitrous oxide-ether anesthesia with negative results. The patient died several hours later. Final impression was that death resulted from allergy to one or more anesthetic agents (most likely Nupercaine).

The final patient in this group, a 38 year old gravida 8, was delivered under Metycaine caudal. She developed a sacral abscess and died 4½ weeks later of septicemia and pulmonary embolization.

Of the remaining patients in the other 4 groups, pregnancy was complicated by severe toxemia in 3, and ruptured tubal pregnancy of the tragic variety in 2. The sixth patient, placed in category V, died following rupture of the uterus and profound shock. Hysterectomy was performed but the patient died on the table following efforts to pass a Miller-Abbott tube into the stomach with the operator attempting to assist the procedure by manipulation from within the abdominal cavity.

The one patient placed in group III deserves special mention since her case so well illustrates death as the result of the unavailability of anesthetists at certain critical times. With a diagnosis of ruptured tubal pregnancy and blood pressure momentarily stabilized by virtue of fluids and transfusions general anesthesia was requested. The one nurse anesthetist on duty was occupied with a thoracic case of possible long duration. The obstetric resident aware that regional anesthesia was usually contraindicated

in such cases elected to attempt laparotomy under spinal Metycaine. The patient expired on the table in shock, the result of blood loss and spinal anesthesia.

It is not surprising that the majority of anesthetic deaths in both Stevenson's series and ours resulted from regional anesthesia. Too often conduction anesthesia is the anesthetic of necessity rather than the agent of choice. It is often used for the simple reason that no one trained in the administration of general anesthetics is available. This problem must be greatly compounded in rural areas.

Conclusion

After the perusal of such records as these one is struck with the necessity for improve-

ment. The responsibility is ours, obstetricians and anesthesiologists alike. Efforts must be directed toward increasing the number of trained anesthesiologists and finally the adequate distribution of such personnel among all services requesting anesthesia. Death is just as lethal whether it occurs incident to aortic anastomosis or following attempts at pain relief in childbirth.

A temporary solution to the problem is to encourage the use of local anesthesia in poor risk cases and in situations in which regional methods are contraindicated. The ideal solution, of course, is the execution of such plans that will result in an adequate supply and the ready availability of anesthesiologists trained in both general and regional techniques with an understanding of those anesthetic problems peculiar to obstetrics.

SALICYLATE INTOXICATION*

KATHERINE DODD, M.D.

University of Arkansas Medical Center

Little Rock, Arkansas

It has long been known that the ingestion of large amounts of salicylates by children may cause severe symptoms and even death. The clinical picture of poisoning consists of rapid deep respirations, vomiting, extreme thirst, profuse sweating, moderate or high fever, mental confusion or delirium, and a tendency to bleed. Later, peripheral circulatory collapse, coma, and convulsions occur. There is an initial polyuria followed by oliguria or even anuria. The urine may be alkaline at first but becomes acid as the intoxication progresses. It often contains acetone in large quantities and there may be the sweetish odor of acetone on the breath. If the children die, little is found at post mortem examination except congestion of the internal organs, the gastrointestinal tract, liver, spleen, and kidneys, and edema and congestion of the brain. Petechial hemorrhages may be present in various organs. The most characteristic symptom of the intoxication is the deep and pauseless breathing which resembles that of diabetic coma. One of our house officers remarked of a patient with salicylate intoxication that he was panting like a dog and looked as if he had run all the way to the hospital.

Pathologic Physiology

Because of the rapid, deep respirations and the finding of a low CO_2 content in the blood in the majority of severely intoxicated patients, the hyperventilation was at first attributed to a severe metabolic acidosis. Later, animal studies and the investigation of older patients with milder symptoms explained the hyperventilation. By observation and chemical examination of the blood it was demonstrated that an early action of salicylates is to produce hyperventilation by stimulation of the respiratory centre of the brain. The increased respiration leads to a lowering of the free CO_2 in the blood and a rise in the pH. The kidney compensates for this by putting out an increased amount of bicarbonate and the pH is brought back to normal. In rheumatic patients with mild salicylism, the pH is usually found to be normal or

slightly high and the CO_2 content of the blood low. The patients usually drink a lot of water and are extremely ill. But in young children, salicylates often cause vomiting, the infants cannot keep water down, or if they become confused and delirious, no longer ask for it. They become dehydrated. They are losing chlorides and water because of their vomiting and much water from the lungs because of their increased breathing. As you know, all air we breathe out must be saturated with water vapor and the more deeply and rapidly we breathe, the more water vapor we lose from our bodies. Such infants become alkalotic in the early stages of salicylate intoxication. Salicylates increase the body's metabolism as was shown by some old work of Dr. Minot and myself and recently confirmed both in England and the United States. The initial alkalosis increases ketosis; fasting, restlessness and fever deplete the glycogen reserves of the liver; and the known interference of salicylates with various enzyme systems probably affects ketone utilization. Because the child has become dehydrated by hyperventilation, vomiting, and failure to eat or drink, his peripheral circulation becomes poor and he looks cold and grey. The circulation to the kidneys is poor and he cannot excrete the ketones and other acid metabolic products. As the child becomes dry from loss of water, his kidneys cease to function well, ketone bodies and other acid metabolic products pile up in his blood and the original picture of respiratory alkalosis becomes changed to that of a metabolic acidosis. Dehydration often produces fever and the body temperature may rise to great heights. Salicylates increase the prothrombin time of the blood and so hemorrhagic phenomena, ecchymoses and petechiae of the skin, mucous membranes and internal organs may be found.

After Coburn advised that patients with rheumatic fever be given not only enough salicylates to control their symptoms, but enough to maintain a blood level of 35-40 mg. of salicylate per 100 cc., it was soon noted by pediatricians that many children so treated became ill. Although they might complain of ringing in their ears, might show muscular irritability, or

*Presented at KSMA Annual Meeting, Sept. 18, 1956.

might vomit, increase in their respiratory rate was usually the first symptom noted and often occurred before the children complained of anything else. If the children had previously been in heart failure and so had been dyspneic, one might think they were in heart failure again but on examination find no symptoms except for the increased respirations. When the administration of salicylates was stopped the hyperventilation and possible irritability and bleeding promptly stopped.

Accidental Poisoning

In a period of 14 months we had five children admitted to the Children's Hospital in Cincinnati who had taken salicylates by mistake. Their ages varied from two to three years. Two were known to have drunk oil of wintergreen, two had eaten aspirin tablets. In the fifth case we could get no history of ingestion of any form of salicylate but the symptoms were so characteristic that we suspected it at once. Subsequently, salicylates were found in the urine and in high concentration in the blood and the diagnosis was confirmed. All five children vomited, some once, one as many as 15 times. All five were noted some hours after the ingestion of the drug to be breathing fast and deep. Two were delirious, one had extreme lethargy alternating with marked restlessness. Their temperatures on admission varied from normal to 102°. All were somewhat dry as could be noted by their sunken eyes, and in some, the residents also noted that they had the thick doughy feeling skin and subcutaneous tissues which one finds in children who have lost much water without accompanying salts. All had a low CO₂ content in the blood, from 9—20 milliequivalents per 100 cc. None of these children were acidotic, the pH was normal or high. All but two had a moderately increased N.P.N. in the blood showing that they were dry and not putting out enough urine to get rid of their nitrogenous waste products. I think these findings show that none of the children had reached a very severe stage of intoxication.

The salicylate levels in these children's blood serum varied from 45 to 86 mg. per 100 cc., levels which anyone would agree are toxic. All showed a positive ferric chloride test on the boiled urine and most had some acetone also. You doubtless remember that when a solution of ferric chloride is added to urine containing diacetic acid a Bordeaux red color appears.

This color is not only produced by diacetic acid, but also by salicylates and phenols. If the urine is first boiled, the diacetic acid is driven off so that if the color develops in boiled urine it indicates the presence of salicylates or phenols and since phenols are rarely taken by children, almost always means that they have taken salicylates.

The children were all treated with large amounts of fluid; most of them received an intravenous drip. The ones who were more ill were put in an oxygen tent, and the more restless ones given sedatives. All recovered in one to four days and went home well.

But, to show you that children who accidentally take salicylates may be sicker than this, I shall cite the case of a patient whom we had two years earlier. C. D. was an infant of 17 months. He was well until he suddenly began to cry 24 hours before admission. A half hour later he vomited and was seen to be breathing fast. He continued to vomit, breathe fast, and cry out as if in pain and was admitted to the hospital the next day. On admission he was semicomatose and looked dry. His respirations were deep and pauseless, 60 per minute. There was a marked odor of acetone on his breath, and his urine gave a strong test for acetone. But, in contrast to the other children, he had a low pH of 7.1 and a CO₂ content of only 6 mEq. His N.P.N. was high, 112 mg. per cent, indicating that he was very dry. Because he was a very young child and there was no history of ingestion of salicylate, his physician thought he might have developed a sudden severe diabetes. But, there was no sugar in his urine, although it gave a strong test for acetone, and there was a strong ferric chloride test on the boiled urine. He was treated with oxygen, sodium bicarbonate to correct his acidosis and large amounts of intravenous fluids. He looked somewhat better the next day, but, that morning, after his temperature was normal, had several generalized convulsions. He received more sedatives, calcium and more fluids and gradually improved over a period of four days. On repeated questioning of his parents it was found that he had probably taken some pills of his father's which contained 15 grains of aspirin each.

At times it may be even more difficult to distinguish salicylate intoxication from diabetes because salicylate intoxication may produce elevated blood sugar levels and also an increase

of non-glucose reducing substances in the urine. A case of a five year old boy was recently reported in the New England Journal of Medicine by Alan Cohen. The parents gave the history that the child had exhibited excessive thirst and appetite as well as increased frequency of urination for 24 hours. He was hyperventilating; there was diabetes in the immediate family. The urine was acid, gave a three plus test for sugar by Benedict's method, and a four plus test for acetone. The blood sugar was 125 mg. per 100 cc., the CO_2 combining power 12 mEq, and the chloride—109 mEq per liter, but the blood pH was 7.8. It was found that after boiling, the urine still gave a four plus ferric chloride test and that the blood salicylate level was 20.4 mg. per 100 cc. Later, they learned that the mother had misunderstood her doctor and had given the child four grams of salicylate a day for the past three days. The child was treated with a slow infusion of five per cent glucose in water and soon recovered.

Diagnosis may be even more difficult when diabetes and salicylism coexist. A four year old child was brought to the Cincinnati Children's Hospital with a history of loss of weight, polyuria and polydypsia of four weeks duration. Three days before admission she was taken to a physician who thought she was suffering from rheumatic fever and prescribed two kinds of pills to be taken every three hours. Her breathing, which was already increased in rate and depth, became steadily worse. On admission she was conscious and not dehydrated but had drunk huge quantities of water. We thought she had diabetes or salicylate poisoning. Her urine contained sugar, acetone, and salicylates. The salicylate level of the blood was 24 mg. per 100 cc., the sugar—150 mg., the CO_2 content—4.62 mEq per litre and the pH—7.03. The N.P.N. was low—24 mg. per 100 cc., probably because of the large quantities of water she had taken. Because of the moderate elevation of blood sugar, we thought at first that she might have only salicylism, but were at a loss to explain the four week's weight loss, polydypsia and polyuria before the medicine was given. It turned out that she had diabetes, but that her hyperpnea, thirst, and acidosis had been aggravated by the salicylates given.

Poisoning by Overdosage

But, while these children who take salicylates by mistake, or are given overdoses, may be

quite ill, and if they take enough or are untreated long enough may die, they are not the ones for whom I wish most to warn you about the dangers of salicylates. There is a far more serious type of salicylate intoxication which occurs in sick younger children who are given salicylates by their doctors or their parents. Sometimes the dose is large enough to produce poisoning in a healthy, older child, but sometimes it has apparently been no larger than that which could be tolerated by an older child who was not ill and was taking food and fluids well. The levels of salicylate in the blood of these children is usually not as high as in those children whose cases I just cited; often it is not high enough to be considered really toxic. During the 14 months that we had the five cases of salicylate intoxication in toddlers who took salicylates by mistake, we had 11 such cases with four deaths.

The children varied in age from three weeks to fourteen months of age, but the majority were under six months of age. All had a preceding history of respiratory infection, usually with some fever, but all had not appeared very ill until after their medication was started. All the children had received some form of "fever" tablets, not once, but many times. Usually the "fever tablets" had been given for a day or more at least every four hours and sometimes as often as every two hours. Some time after the fever tablets were started, the children were noted by their parents to be breathing fast. All but two were breathing fast and deep when admitted to the hospital. All of the children were dehydrated on admission, one was convulsing, many were grey with cold hands and feet. The ones who were not convulsing looked listless or were comatose. The temperatures of the children on admission varied from normal to 109° . The majority had some elevation of temperature, often as high as 105° . All but two who were comatose on admission and had ceased to breathe deeply, were hyperventilating, with respirations ranging from 60 to 100 per minute. Those who were hyperventilating had a low CO_2 content of the blood. The pH varied from a moderately high of 7.5 to a low of 7.1. The N.P.N. was elevated in every case and in those who died was very high, from 65 to 112. Five had salicylate levels of the blood of over 40. The highest level was 70 mg. per cent. The others had salicylate levels between 15 and 31 mg. per cent, levels which are not supposed

to be toxic. Seven of the children had convulsions; all who died had convulsions. One of the seven had convulsions before admission; in the others, the convulsions did not occur until 24 hours after admission when the temperature was down and they already seemed better.

A few typical histories might be of interest:

W.M.R., a 3 mos. old boy developed a cold a week before admission. He was treated with penicillin and "fever tablets" and in addition, received 2½ gr. of aspirin at least once and probably several times. The day before admission he vomited and began to breathe fast and deep. On admission he was breathing deeply, 50 times a minute. He was semicomatose, dry, and grey. His pH on admission was 7.53, his CO₂ content 9.8 mEq. per liter. His N.P.N. was 64 mg. per cent and his salicylate level 44 mg. per cent. He was dehydrated and had a toxic level of salicylates, but was still alkalotic. He was put in an oxygen tent, treated with large quantities of fluids given by continuous intravenous drip, and was sedated with phenobarbital. The day after admission he looked much better, although he was still lethargic and hyperventilating. That afternoon he had three bouts of hard generalized convulsions. These were treated with intravenous sodium Amytal® and calcium and ceased after about two hours. From then on recovery was slow but uneventful.

D.M., a four mos. old child had been ill with a "cold" and slight fever for four days. She was taken to a doctor who advised the parents to give her one half grain of aspirin every three or four hours. The parents misunderstood and gave two and one half grains four times one day and three times the next. On the morning of admission the baby seemed worse and began to breathe fast. Her temperature was 103°. That evening her temperature went to 106°, she became semicomatose and stopped eating or drinking. She had voided little all day. On admission she was unresponsive, her eyes were sunken and her skin thick and dry. She was breathing deeply, about 60 times a minute. Her blood pH was 7.15; her CO₂ content—11.5 mEq.; her N.P.N.—68 mg. per cent. This baby had gone beyond the preliminary stage of respiratory alkalosis and was now in the late and more serious stage of metabolic acidosis. She, too, was put in an oxygen tent, sponged to reduce her temperature, given large amounts of fluids and sedation. She convulsed off and on for the next two days in spite of barbiturate and

calcium therapy, but then gradually improved.

The four children who died had very similar stories except that as a whole their temperatures were higher on admission, they seemed more deeply comatose, and were more dehydrated. All died within 24 hours of admission. Autopsies were performed on three of the children. Congestion of the internal organs, congestion and edema of the brain, and a small amount of bronchial pneumonia were the only abnormal findings.

Whether salicylate intoxication was the only cause of severe illness in these infants, and of death in four of them, is difficult to say. Erganian and others reported eleven similar cases from St. Louis with only one death. Their patients were similar in age, all had received salicylate therapy for mild upper respiratory infections and all were breathing deeply and pauselessly. Seven of the 11 had salicylate levels of more than 35 mg. per cent in the blood on admission, the levels in the other four varied from 7.3 to 20.8 mg. per cent.

Hyperventilation

It is well known that with some illnesses children hyperventilate. We have noted hyperventilation in pneumonia, diarrhea, severe burns and in children with the cyanotic type of heart disease none of whom had been treated with salicylates. Dr. Rapoport collected 12 cases of what seemed to be apparent primary hyperventilation probably set off by a reflex mechanism from the upper respiratory tract. At the time we were not impressed with the frequency of the administration of salicylates to such children and did not inquire for the history of the giving of salicylates in all cases, nor look for salicylates in the blood and urine. Two of the children had definitely not received salicylates. The others may or may not have received some. At all events the continuous administration of salicylates even in supposedly non-toxic doses would seem to be a dangerous practice in small children with fever. The children may well be hyperventilating because of their primary illness, salicylates exaggerate this or cause it to occur, the children's tendency to refuse fluids or vomit is increased, they become stuporous and dehydrated, often convulse and may die. Salicylates have no real therapeutic effect on the illness, but can only reduce fever or make the patient more comfortable. It seems far wiser to use only fluids, sponging and specific

therapy and reserve salicylates for the child who has high fever after immunization or for older children who may well be less susceptible to salicylates and in whom a mistake in dosage is less serious.

Treatment

Therapy of salicylate intoxication consists in reduction of high temperature when present by means of cold or tepid sponging. The children who are severely ill should receive oxygen to increase the oxygenation of their blood and so the oxygen supply to their brains, kidneys, and other tissue. Fluids should be given in large quantities because the majority of the children are dehydrated and also because fluid administration increases the elimination of salicylates by increasing urine flow. The fluid should be mostly in the form of sugar in water for most of the dehydration is caused by loss of water from the lungs and much sugar is needed to overcome the ketosis. Some electrolyte solution is advisable, particularly in those children who have vomited repeatedly. In severe cases alkali in the form of sodium bicarbonate or lactate is advisable. Salicylates are more promptly excreted in an alkaline urine and if acidosis is severe the child will, in my opinion, do better with a moderate increase in pH of the blood. We have usually given alkali calculated to raise the plasma bicarbonate 5 mEq. per liter. Children who are very restless or are convulsing should receive sedation. It is dangerous to give enough sedation to control the hyperventilation. Guest and Rapoport have shown that dogs so treated go suddenly from hyperventilation to respiratory arrest and die much sooner than when left alone or treated with moderate sedation. An injection of vitamin K is advisable to shorten the prolonged prothrombin time.

I now think that although the convulsions seen before or shortly after our patients were admitted were secondary to anoxia of the brain, we caused some of the late convulsions during convalescence by over zealous administration of glucose in water. Although the total electrolytes were not reduced even to normal from their high levels, the total electrolyte concentration of the serum was very rapidly reduced, often the chlorides alone as much as 25 mEq. in 24 hours, and in consequence, the blood was diluted and the cells doubtless over hydrated. The low serum calciums, were probably partly due to dilution of the blood stream. Dr. Clark West

of Cincinnati has recently written me that he has been able to rescue some children so treated by the use of 3% NaCl intravenously. It would be wiser, therefore, to give the children not more than 100 c.c. of 5 or 10% glucose per kilogram in 24 hours after their initial shock is overcome and to add some Na and KCl to this after voiding is well established. If late convulsions occur in spite of more conservative therapy, calcium gluconate, and if that does not work, 3% sodium chloride may be given intravenously.

Complications

In children who recover from their salicylate intoxication we have seen two complications occur. Three children have developed a widespread fatal pneumonia. In these children it was of interest to watch their blood chemistry change from a metabolic acidosis with low pH and low CO₂, to a marked respiratory acidosis with low pH and extremely high CO₂. We thought the dehydration and extreme dryness of the mucous membranes may have predisposed them to infection of the respiratory tract. One child of four months who was improving but still hyperventilating, suddenly became cyanotic and went into collapse. His neck, face, and chest became swollen with subcutaneous emphysema and by X-ray he was found to have massive mediastinal emphysema and bilateral pneumothorax. The excessive hyperventilation had apparently produced sufficient overexpansion of his alveoli to cause rupture of some of them and air had dissected along the blood vessels into his mediastinum and into the pleural spaces and even the subcutaneous tissues.

Conclusion

The zealousness of the drug companies to make aspirin more acceptable to children by making the tablets pleasant to take and advertising them widely is in my opinion very dangerous. It has undoubtedly increased the accidental ingestion of aspirin and has probably increased the use of aspirin by parents and physicians. There is now a one and one half grain and a one grain tablet known as baby aspirin, and a two and one half grain called children's aspirin which makes it very easy to give the wrong tablet in prescriptions by mistake. As far as I know none of these tablets are labelled as a dangerous drug. According to Katherine Bain

HAEMATOLOGICAL REACTIONS TO DRUG THERAPY*

MURRAY L. RICH, M.D.

Covington, Ky.

IT HAS been known for many years that the use of drugs is often associated with side effects which may or may not be serious, yet the concept that there may be adverse effects on the hematopoietic system is of relatively recent date. It was first realized that certain chemicals could produce a severe anemia when four cases of bone marrow aplasia were described in 1897 among workers exposed to benzene fumes.¹ In 1922 the syndrome of agranulocytosis was described by Schultz.² For some years it remained a rather uncommon entity of unknown etiology. Then about 1929 it began occurring with greater frequency and in 1931 Kracke³ pointed out that this increase in frequency corresponded with the introduction of certain coal tar derivatives into therapeutics. He tried to find some relationship between the use of drugs containing a benzene ring and the appearance of this disease. It remained, however, until 1933 for Madison and Squier⁴ to demonstrate beyond question the role of amidopyrine in the production of this disease. They showed that the majority of these patients gave a definite history of amidopyrine ingestion either alone or in combination with other analgesics or sedatives. They further showed that a fall in the white count would occur in those individuals who had recovered if they were subsequently given even a small dose. This work was amply confirmed by other investigators and consequently the use of amidopyrine was greatly curtailed, resulting in a marked decline in the number of reported cases.

**Read before the annual meeting of the Kentucky State Medical Association, American College of Physicians Session, October 19, 1956.*

in 1949-50, aspirin and salicylate poisoning accounted for 113 deaths in children under five in the United States. Probably most of these cases were those of children who took or were given known over-doses of aspirin. I believe that if we had the true figures they would be more than doubled by the inclusion of cases in which aspirin prescribed for sick infants aggravated the illness and was often actually the sole cause of death. Salicylates are dangerous drugs, they should not be left around the house where

It was not long until other drugs were found to have adverse effects on the blood. One of the first was dinitrophenol. This was a preparation which was used to aid in weight reduction in cases of obesity. It was found so toxic that its use was soon discontinued. Shortly after the introduction of the sulfonamides it was noted that they occasionally had an adverse effect on the blood picture. Still later when thiouracil was introduced in the treatment of hyperthyroidism it too was found to exert a similar effect on the blood. As time passed and more new compounds were introduced the list of drugs which was found potentially toxic became quite extensive. It was noted that different types of reactions were produced by different drugs. Some of the drugs predominantly caused neutropenia while others disturbed the platelets, causing purpura, and others had still a more profound effect, depressing all the marrow elements, resulting in an aplastic anemia.

Although these reactions are usually very serious and are frequently fatal their overall incidence is not very great. Consequently no one observer ever sees many such cases. Yet when they do occur, particularly if they follow the administration of a drug for some relatively trivial condition, the impact on the physician concerned is very marked to say the least.

The Most Frequent Offenders

In an attempt to determine which drugs are most apt to produce these reactions, the literature of the past ten years was surveyed. It was found that there are listed in the Index Medicus and the Current List of Medical Literature of the Armed Forces Medical Library a total of

young children can get them, they should be prescribed for young children with great caution and should never be prescribed for children in running doses except in cases of rheumatic fever and perhaps rheumatoid arthritis. Mothers should be warned of their toxicity and every effort made to acquaint physicians of their dangers. The treatment of salicylism is an emergency which requires close observation and an intimate knowledge of the multiple effects of salicylates on the body.

393 papers giving reports of cases of hematologic reactions to drug therapy. This represents many more than 393 cases since many of these papers describe more than one case. At least 80 different preparations are named in these papers. Most of the drugs are responsible for only one or two papers but there are 19 preparations concerning which 5 or more papers have been published. (Table No. 1) It is to be remembered that in this review only the last 10

Table 1.

1. Chloramphenicol	40	10. Gold Salts	18
2. Quinine & Quinidine	25	11. Thiouracil	15
3. Tibione	25	12. Tridione	13
4. Butazolidin	24	13. Sedormid	11
5. Arsphenamines	23	14. Methylthiouracil	6
6. Streptomycin	21	15. Tapazole	6
7. Amidopyrine	20	16. Propylthiouracil	6
8. Sulfonamides	20	17. Isoniazide	6
9. Mesantoin	19	18. Thorazine	6
		19. Diparcol	5

List of 19 Drugs concerning which 5 or more Papers have been published in the past 10 years.

years are considered and for this reason it is probable that there has been considerable change in the frequency with which certain drugs have been used. For instance, dinitrophenol is not mentioned at all where in previous years it was one of the frequent offenders. It is of interest to note that amidopyrine is mentioned in 20 papers in spite of the fact that it was the first drug to be incriminated. One wonders if the medical profession has forgotten its earlier lesson and is trying again to use a drug of known toxicity. The same might be said of the arsphenamines which were mentioned in 23 papers. In defense of American physicians, however, it must be said that all but 4 of these 43 papers appeared in foreign literature. It is also of interest to note the relatively recent drugs which are frequently mentioned. Thorazine® was named in six articles all within the past year. Isoniazide was held responsible for thrombocytopenic purpura in six articles which appeared within the past two years. Butazolidin® was mentioned in 24 articles which appeared since 1953, and chloramphenicol in 40 articles since 1952. Mesantoin® first showed up as an offender in 1948 and since then has been mentioned in 19 articles.

The Mechanism of Toxicity

The manner in which these hematological changes are brought about has been the subject of speculation for a number of years. One

theory was that these drugs brought about some interference with the metabolic processes involved in the production of the cells or their precursors. Another postulated the direct destruction of the cells or their precursors in the bone marrow by an assumed toxic action of the drug. In the last few years, experimental evidence has accumulated which indicates that this reaction at least in some cases is probably in the nature of an immune sensitivity reaction involving the presence of sensitized serum and the drug. In 1949 Ackroyd⁵ developed an in vitro method of studying this immune mechanism in individuals who had purpura following the ingestion of sedormid. He showed that serum from a patient who has had sedormid purpura will produce lysis of platelets when mixed with complement and a solution of sedormid. Lysis does not occur if normal serum is used, nor if sedormid is omitted from the mixture. The same mechanism has been demonstrated in purpura induced by quinidine where it can be shown that incubation of normal platelets, sensitized serum, and quinidine produces agglutination of the platelets, whereas no agglutination occurs when quinidine is omitted from the reaction, or if normal serum is substituted for the sensitized serum.⁶ Within the last few months a similar mechanism involving the red cells has been demonstrated using the serum of a patient who had developed a hemolytic anemia following the administration of quinidine.⁷ It was found that this patient's serum contained a factor which in the presence of quinidine caused agglutination of red cells and which produced hemolysis when complement was added.

Along these same lines might be mentioned a case which I observed some years ago. A young white woman collapsed almost immediately after an injection of Neoarsphenamine following which she quickly developed an intense purpura. A blood smear taken at this time showed a marked diminution in the number of platelets. In addition there were a number of cells on the slide which were interpreted to be degenerated neutrophils. They were smaller than normal, some being no larger than red cells with pyknotic nuclei and vacuolization of the cytoplasm. The majority of the lymphocytes had not undergone these changes but two or three were seen which showed evidence of some damage. I believe that these changes in the white cells were probably produced by the same

type of immune reaction as that which results in lysis of platelets by sedormid and by quinidine.

New drugs are constantly being introduced and it would be of distinct benefit to the clinician if he could determine whether or not any new preparation might be potentially dangerous to the hematopoietic system. These drugs are introduced after considerable clinical investigation and sometimes the statement is made that they are without hematologic effect. Although it might be true that the original investigator encountered no untoward reactions in his series of cases, he has no right to infer from a single series that a drug is entirely safe as regards its effect on the blood. Clinical testing is most unsatisfactory from the standpoint of whether or not a drug might produce granulocytopenia, aplastic anemia or purpura. It requires the observation of many thousands of cases to determine whether or not the blood might be seriously effected. A review of the history of most of the recent drugs which have had toxic effects will show that at the time of their introduction no serious effects had been encountered and yet it was only a few months before reports appeared in which various types of dyscrasias were noted. If such is the case how is the clinician to know whether or not any new preparation is to be considered non-toxic? The answer is that it is impossible to be sure until many thousands of cases have been observed and even then a rare sensitivity might develop.

The question might arise as to whether or not any particular chemical formula or structure might be more prone to cause reactions. This problem too is difficult to answer. In the first place, the nomenclature of new products is somewhat confusing. Most of them have three different names. The first is a registered trademark name given it by the manufacturer which gives little or no information regarding the chemical composition of the product. Then there is a generic name approved by the Council on Pharmacy and Chemistry of the American Medical Association which likewise does not reveal its true makeup. The third name is the one given it by the organic chemist. This, of course, establishes its identity but most practicing physicians have forgotten what little organic chemistry they once knew, and these long complicated chemical formulae mean little or nothing to them. As an example of what I mean, Thorazine is a trademark name belonging to the Smith, Kline & French Laboratories.

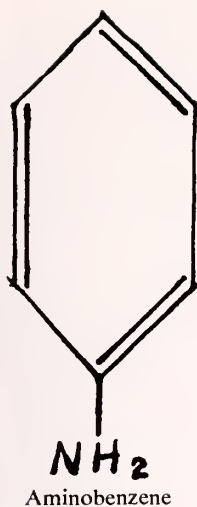
The generic name is Chlorpromazine Hydrochloride. In chemical terms, this preparation is 10-3-Dimethylaminopropyl 2-Chlorphenothiazine Hydrochloride. A chemist could write the structural formula from this chemical name which would give a visual picture of its structure.

Study of Structural Formula

It is well known that there are many closely related compounds used in medicine in which the basic formula is the same but in which are different attached radicals that give it slight differences in intensity of action, side effects and degree of toxicity. It seemed to me that it might be possible to check the structural formulas of those preparations which are the most common offenders and see if there was any common structure which might be present in those drugs. This has been done and with some trepidation since I am not an organic chemist by any means, I would like to present the following findings.

Organic chemicals can be roughly divided into two groups. First there are the aliphatic hydrocarbons or straight chain compounds and second the cyclic compounds which are best illustrated by the benzene ring. Since benzene itself with its simple ring structure is known to be toxic to the blood one might suppose that any drug with a benzene ring in it might be dangerous. Most of the toxic compounds do contain a benzene ring but it is not quite as simple as this for many of our most frequently used drugs likewise contain a benzene ring. Phenobarbital is an example of this and as is well known this is relatively innocuous as far as the blood is concerned.

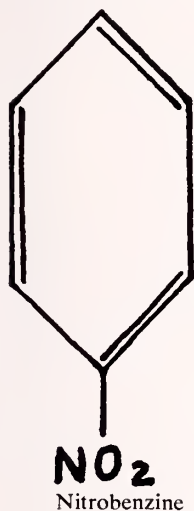
There are many derivatives of the benzene ring. One of these is Aminobenzine which consists of a benzene ring to which is attached an amine or NH_2 group as illustrated. (Figure 1) Many thousands of substitution products can be based on this formula by substituting one or more of the hydrogen atoms with either short or long complicated radicals. It is surprising to find the rather large group of toxic compounds which fit into this category. Amidopyrine, the arsphenamines, Butazolidin, Streptomycin, all the sulfonamides and Tibione fall in this category. Then there is another group in which a nitric oxide radical is attached to the benzene



Amidopyrine
Arsphenamines
Butazolidine
Streptomycin
Sulfonamides
Tibione

Fig. 1

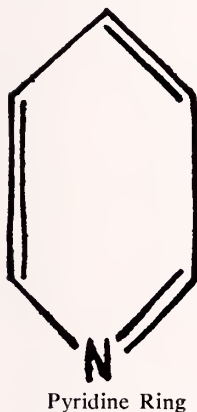
ring as shown. (Figure 2) This is called a Nitrobenzene group. Both dinitrophenol and chloramphenicol contain this grouping. There is a third group in which one of the carbon atoms



Chloramphenicol
Dinitrophenol

Fig. 2

of the benzene ring is replaced by a nitrogen atom. (Figure 3) This is called a pyridine ring

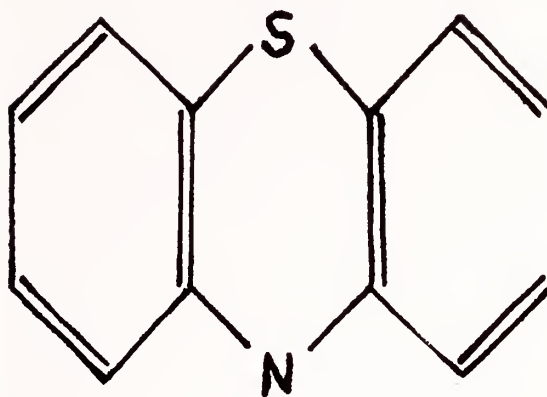


Quinine
Quinidine
Isoniazid

Fig. 3

and there are several compounds which contain this ring, namely quinine and quinidine and isoniazide. Nicotinic acid also contains it but as far as I know it is not toxic.

Then there is a base in which two benzene rings are jointed together through nitrogen and sulfur atoms as illustrated. (Figure 4) It is



Phenothiazine Base
Thorazine
Diparcol
Fig. 4

called a phenothiazine base and both Thorazine and Diparcol contain it. Other preparations are also derived from this base, namely the anti-histamines, Phenergan and Pyrrolazote and the newly introduced Sparine.

Finally, there is a group of so called cyclic compounds in which there is no benzene ring but in which there is a closed chain of carbon atoms in association with nitrogen, oxygen or sulfur. (Figure 5) Several of these are illustrated and each of these likewise has proven to

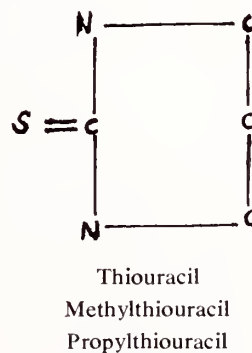
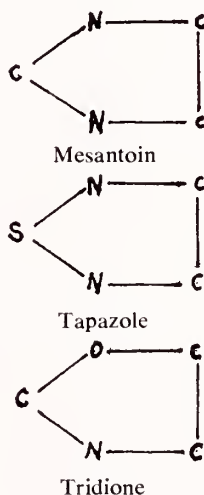


Fig. 5

be toxic. Mesantoin and Tapazole belong in this group, as does Tridione. It is to be noted that these cyclic compounds consist of five atoms. Another set of cyclic compounds consisting of six atoms is the basis for the thiouracil drugs, an example of which is shown here. Thiouracil, propylthiouracil and methylthiouracil all contain this basic ring.

Avoidance of Reactions

From the above illustrations it is noted that there is no close similarity of structure which these potentially toxic drugs exhibit. Nevertheless, it can be seen that they all contain either a benzene ring with a closely attached nitrogen atom or a cyclic compound with nitrogen in the cycle. The only two exceptions to this in our list of 19 drugs are sedormid which is a straight chained aliphatic compound containing 2 nitrogen atoms, and the preparations containing gold, which is a heavy metal. It is not to be inferred that all drugs with such structures are potentially toxic but I believe that if one knows that any new drug contains such a combination he should look upon it with suspicion and withhold final appraisal regarding its toxicity until many thousands of individuals have taken it. Whether or not the original drug itself is toxic or whether one of its products of degradation is responsible makes little difference. As a clinician I believe that we should examine the structural formula of any newly introduced product and if it contains either a benzene ring with a closely attached nitrogen atom or a cyclic compound containing nitrogen we should regard it with suspicion.

Needless to say, it is important that every attempt be made to avoid these reactions. If a patient has demonstrated any type of sensitivity, hematologic or otherwise, to one of these drugs known to be potentially toxic, the drug should not be used. Furthermore, I do not believe that any drug of known toxic potentiality should be used if another safer drug can do equally as well. If it becomes necessary to use one of these drugs then the possibility of a reaction must be weighed against the therapeutic benefit expected. Periodic surveys of the peripheral blood while the drug is being administered is of some value, but too much reliance should not be placed on this, for these reactions may appear suddenly without prior warning. The clinician must be aware of such danger signals as pur-

pura, pallor or unexplained fever and sore throat and he should caution the patient that the drug must be stopped on the appearance of these signs. In the case of new drugs or drugs recently introduced I believe that care should be exercised in their use if they can be shown to possess a structural formula containing the factors described above.

Once the reaction has occurred it is extremely important that the offending drug be stopped immediately. Where there is depression of the neutrophils either as a part of the picture of an aplastic anemia or in agranulocytosis the use of antibiotics is indicated and should be continued as long as the neutropenia persists. The use of blood is of distinct value when anemia is part of the picture. In recent years steroid therapy has been advocated because of the immunologic type reaction which is present in many of these cases. One should use due caution however, as their indiscriminate use might further disturb the already weakened protective mechanisms against infection and might turn a localized infection into a fulminating bacteremia.

Conclusion

In conclusion, it may be said that a number of drugs have the potentiality of producing serious blood dyscrasias. These are probably produced through the mechanism of a sensitivity reaction in which there is either destruction or sequestration of circulating blood elements or their precursors. Some knowledge of the chemical structure of newly introduced drugs might put us on guard as to their dangerous potentialities. Every care should be exercised to prevent these reactions since treatment is not always successful.

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MUSCULAR TORTICOLLIS IN INFANTS*

DANIEL G. COSTIGAN, M.D. and JAMES M. RILEY, M.D.**

Louisville

THE purpose of this paper is to present five recent cases, treated by the authors, of muscular torticollis in infants or the so-called olive seed tumor of the sternocleidomastoid muscle. This paper will not include other causes of torticollis seen in infants.

Muscular torticollis has been known for many years, and was first written about by Mikulicz in 1895. In more recent years this particular malady in infants has received more attention, first by Middleton, and later by the late Dr. Fremont Chandler.

Etiology

The etiology of the olive seed tumor, or enlargement, seen in the sternocleidomastoid muscle in infants is one of great debate. Various theories will be mentioned here but it is not the purpose of this paper to offer a new theory, to explain the etiology, or try to substantiate any of the various theories causing this so-called tumor. Regardless of the etiology it is obscure. The most generally thought of cause of this particular disease is that of a birth injury, either a breech delivery, or possibly an injury to the neck, or base of the neck, at the time of delivery, such as a fracture of the clavicle. However, this has not been substantiated by workers such as Chandler who have found that muscular torticollis has developed in children delivered by Cesarean section, and by delivery from below in which there was no definite trauma, the malady being noticed within the first twenty-four hours. Originally it was thought to be a hematoma of the sternocleidomastoid muscle but pathological specimens as early as three weeks of age have failed to show any hemosiderin, or other blood pigment. The hypothesis of ischemia first suggested by Mikulicz, and written about since then, was compared to the muscular fibrosis following a Volkmann's contracture. The workers along this line thought that there had been some injury to the arterial supply to the sternomastoid muscle. The blood supply to this muscle is precarious at best. Middleton thought that perhaps the torti-

collis could be based on an ischemia of the muscle due to lack of proper venous drainage of the muscle which in turn was caused by the fetal head being in torsion with resultant obstruction of the venous supply. This theory had many proponents, while many workers could not agree with it at all. It is thought by other workers that intra-uterine malposition of the fetal head and neck could be the cause of the torticollis. There is the hypothesis of heredity but no series has ever been published in the literature showing a higher instance than two cases, one in a mother, and one in a child. The hypothesis of infective myositis has been proposed. There has also been proposed the hypothesis that the condition is caused by atrophy of the anterior horn cells, but again, this has never been proved. In short the etiology is still in doubt but any one, or several of these etiological agents could be the cause.

Pathology

The pathology of the lesion is fairly well established and it is not the purpose of this paper to enlarge upon it. The gross pathology depends upon the time the specimen is removed. If it is taken early, the mass is usually fusiform, white in appearance, and is usually filling the majority of the muscle belly, and sometimes the complete muscle of the sternocleidomastoid muscle. The majority of the lesions are located in the lower half of the muscle, so that the muscle will appear white on the inferior portion and red, or normal muscle color, above it. Microscopic sections will show, according to the age of the patient at the time of surgical removal, a various amount of fibrous tissue. Regardless of the time of removal, the majority of the sections will be filled with fibrous tissues along with a small amount of skeletal muscle sparsely located and sprinkled throughout the tumor. The most normal muscle bundles will be found on the periphery of the lesion.

Diagnosis and Course

About ten days to fourteen days after birth a tumor is usually noted in the substance, or belly, of the sternocleidomastoid muscle, most frequently found by the mother while giving the

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**Department of Orthopedic Surgery University of Louisville and Kosair Crippled Children Hospital.

child a bath. It had been noted previous to this by the mother, and occasionally the pediatrician, that the child held his head toward one side and attempts to make him move it met with resistance. The tumor is apparently tender. It frequently has been noted that the olive seed tumor had been seen earlier than the ten days as mentioned. If nothing is done about the tumor, or if surgery is not performed, the mass gradually disappears in from four to six months but during this time torticollis develops gradually to a fixed position, with shortening of the neck on the affected side and a definite facial asymmetry which rapidly becomes permanent. It will be noted in late cases that the mastoid process on the affected sides becomes elongated and even ossification may occur in a portion of the muscle, particularly that along the clavicular origin. The tumor when first felt is of a fibrous or rubbery feel, freely movable beneath the skin, but felt to be definitely located in the belly of the sternocleidomastoid muscle.

Treatment

The best treatment of muscular torticollis in infants is felt, by the authors, to be that of surgical excision of the olive seed mass. It is also felt that the tumor should be removed as early as possible, preferably before two months of age. The earliest case which the authors have operated on has been four weeks old. The oldest cases in which the tumor could still be felt were two in number, both three months of age. Although both of these cases were helped they did not respond as rapidly as the three cases operated on at a younger age. The treatment by surgery is not subscribed to by all, but it is the authors' opinion that it gives the best and most permanent result, with little or no disability or cosmetic deformity. The procedure for removal of the mass is performed under general anesthesia, after the usual preoperative preparation of the infant. The operation is done with the patient in the supine position. A small incision is made in the line of a neck crease, just above the clavicle, over the sternocleidomastoid tumor. The sternocleidomastoid muscle is freed by sharp and blunt dissection, both on the superficial and deep portions. The deep portion is encircled by a small curved mosquito, or similar type instrument, and the muscle is isolated. It has been our experience that these tumors usually include practically the whole lower two-thirds of the muscle. After all bleed-

ing is controlled, and with care that none of the larger vessels are damaged, the upper end is incised and reflected downward towards the base of the neck. At this time the deep structures are further isolated from the deep surface of the tumor, and both the clavicular and sternal heads of the sternocleidomastoid muscle are resected. Further bleeding is controlled and the wound is closed by interrupted triple O chromic catgut sutures for the platysmal layer, and continuous subcuticular triple O chromic suture for the skin. A small dressing is applied and the head is turned to the exact opposite of the deformity. In this position a cast including the head, neck, and upper torso, is applied. The cast is left on for three weeks. Active and passive exercises are then started and the parents are instructed to put the child through a normal range of motion both actively and passively several times each day. Some authors have felt that it is not necessary to cast these patients. We have never done a case without casting. To a great extent shortening is certain to have taken place and to place the head in the corrected position gives the best chance for complete recovery.

Case Reports

M. K. This child was first seen July 29, 1955 at 4½ weeks of age. The baby had been noted at birth to hold the head to the left with the right ear depressed against the right shoulder. Any attempts at this early age to correct the deformity of the head would cause the child to cry. The child had been sent for treatment to a neurosurgeon who in turn referred him for orthopedic treatment. Examination revealed a well developed, well nourished, 4½ week old male infant who held the head to the left with the right ear depressed against the shoulder. On the right side of the neck was a mass ¾" in diameter, which was semi-firm, rubbery in consistency, filling the middle half of the sternocleidomastoid muscle. Apparently the tumor was tender. The child resisted all movements to turn the head to the right side. The patient was operated on August 4, 1955, remained in the hospital three days and was dismissed with normal postoperative course. When last seen in September 1956 there was complete motion of the neck, no facial asymmetry, the scar was not visible, and there was no cosmetic deformity.

M. W. This child was seen on May 15, 1956, at three months of age. The history obtained at

that time indicated that he had been a breech delivery, and that shortly after delivery the mother noted that the child could not turn his head to the left. Examination revealed that the child held the head looking towards the left with the right ear depressed against the right shoulder. There was a typical olive shaped mass located in the mid-portion of the right sternocleidomastoid muscle, which apparently was not tender. There was definite resistance to correction of the torticollis. There was a definite facial asymmetry present. X-ray examination was negative. On May 25, 1956, the sternocleidomastoid muscle was exposed and resected in the usual manner. He remained in the hospital for three days and was dismissed with an uneventful postoperative course. The cast was removed four weeks after surgery and exercises begun. He was last seen in September 1956 at which time there was complete motion of the head, and the scar was well healed; however, there was still present a facial asymmetry which had improved in one month's time, since he was last seen in August. The torticollis, though barely present, was still noted. It also was much improved from the time of surgery.

T. K. K. This patient was first seen on April 23, 1956 at two months of age. It had been noted that the child could not turn her head to the left and held the head facing the right. A mass had been noted in the left sternocleidomastoid muscle by a neighbor when the infant was three to four weeks of age. The mother could not give an adequate history apparently due to lack of normal intelligence. Other than a dietary disorder since birth there was no other history obtained. Examination revealed a two month old female infant lying with the head facing to the right. Any attempts to move the head to the left met with resistance. There was a facial asymmetry present. There was a mass palpable, $\frac{3}{4}$ " in diameter, in the mid-portion of the sternocleidomastoid muscle. Surgery was advised and carried out on May 2, 1956. The child remained in the hospital until June 22, 1956. The reason for the long hospital stay was because the mother could not be trusted to care for the child adequately. The child was last seen in September 1956 at which time motion of the head and neck was normal. There was still slight facial asymmetry present.

K. F. This child was seen first at three weeks of age. It was noted by the mother at the time the child was brought home from the hospital

that she held her head with the right ear depressed against the right shoulder and looked to the left. Any attempts to straighten the baby's head would cause her to cry. She was seen by one of the local pediatricians who referred the patient for consultation. Birth history was that the child had been delivered after 4½ hours of labor, that the child was a breech delivery, but no difficulties of the delivery were known to have occurred. She was one of three children, the other children were normal. Examination revealed a well nourished and well developed three week old baby who, when lying on the examining table, faced the left with the right ear depressed towards the right shoulder. Any attempts to straighten the baby's head met with definite resistance and caused the baby to cry. Palpation of the right sternocleidomastoid area revealed a small firm mass, slightly over 1 cm. in diameter, lying one inch above the clavicular origin of this muscle. Apparently the tumor was tender because if it was palpated the child cried. If the opposite side of the neck was palpated the child did not cry. X-ray examination was negative. The mother at first was not sure that the surgery was desired and she was seen one week later at which time the child was definitely worse in that the torticollis could not be corrected at all, a facial asymmetry was already beginning to develop. On October 18th, twelve days after first seeing the child, when she was slightly under five weeks of age, the patient was operated on and it was noted at this time that both bellies of the sternocleidomastoid muscle were scarred. Both heads of the origin were removed and the lower two-thirds of the muscle. A cast was applied and she remained in the hospital for three days. The cast was removed in three weeks and she has been followed since. When last seen in September of this year there was no facial asymmetry, there was full neck motion, and no deformity due to the resection of the muscle could be noted.

C. C. This child was first seen July 14, 1955, the day of birth, for bilateral deformities of the feet. A diagnosis of bilateral talipes calcaneovalgus was made and on the following day casts for the correction of this deformity were applied. The authors at this time either did not notice the deformity of the head and neck or it was not present. Two weeks to the day after birth, while changing the casts, it was noted that a torticollis was present. At this time a typical olive seed mass was noted in the left sternoclei-

domastoid muscle. The child's left ear was depressed to the left shoulder. At this time the child was two weeks of age. On August 14th, at thirty-two days of age, the child was operated on and the tumor removed without difficulty. He remained in the hospital for two days. The cast was removed two weeks following surgery. At the time of removal there was complete motion of the head, and the wound was well healed. Since then the child has been followed and was last seen in September 1956, at which time there was complete motion of the head and neck, the scar was not visible, and there was no facial asymmetry and no cosmetic deformity.

Discussion

Five cases of muscular torticollis in infants have been reported, three of which were operated on under five weeks of age, and two of which were operated on at three months. It is the feeling of the authors that surgery should be done at an early age to give the best possible result, both functionally and cosmetically. The postoperative course is uneventful and the hospital stay is brief. Although it is reported by many other writers that torticollis due to this reason will improve spontaneously, we do not share this feeling. Not reported in these cases is one case of a child, now seven years of age, who was treated by the authors for a cyst of the humerus. It was noted during this illness that the child had a very definite facial asymmetry and mild torticollis. The history re-

vealed that the child had been treated elsewhere for an olive seed mass in the sternocleidomastoid muscle. The mass had been noted within the first two weeks following delivery. The orthopedist and attendants advised the mother to do nothing but watch it, and it was watched for a period of nine months, at which time the torticollis had become so fixed that the mother requested surgery, and surgery was performed. The mother felt that the surgery did relieve the torticollis but the child still has definite deformity. It is because of cases such as this that the authors feel that early surgery gives the best chance for complete recovery.

Note:

Since this paper was written two other cases similar to those reported have been operated, both of whom were female infants, one 3½ weeks of age and one three months of age, with excellent result and no residual disability or deformity.

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PROBLEMS OF A CANCER CLINIC PROGRAM IN A 100 BED HOSPITAL

HENRY S. HARRIS, M.D.

Bowling Green, Ky.

Bowling Green is a town of 30,000, remote from a medical center; served by a 100 bed general hospital; and staffed by 30 doctors. Of particular interest to me as a general surgeon has been our local cancer program. It is about this cancer program that I wish to make a few brief comments. I will consider only that phase of the program which affects directly the doctor and patient in our community. Time will not permit any discussion of the excellent work and organization of the American Cancer Society. This is well reviewed in their annual report which is available to everyone.

Since 1947 a few of our staff doctors have met each Wednesday morning at the hospital to see and recommend treatment of cancer patients. The American Cancer Society has supplied radium, a deep x-ray therapy unit, and has paid a substantial part of the hospital's expense on indigent patients with cancer. With the emphasis which the American College of Surgeons has placed on the cancer program in recent years, we have been stimulated to expand our own program. To undertake such expansion we first sought to answer the simple and basic questions; what advantages to the patients and doctors in our community could such a program offer? Perhaps as some suggested it was not worthwhile at all. As individual doctors we were treating cancer right along anyway so why spend time organizing a clinic for cancer anymore than we would for arthritis, hypertension or any similar problem in medicine? After searching through the material put out on cancer programs by the American College of Surgeons and the American Cancer Society, only one common phase seemed to be of out-standing practical and immediate value in our local situation. That was the educational phase of this program, particularly self-education of our doctors. Such a clinic organization will allow its staff to study the total hospital experience with cancer at the local level. The patients will benefit indirectly as their doctors

learn or review the basic concepts of cancer and its treatment. It was felt that such an educational program could succeed only if all cancer cases, both private and charity were brought under study and if all members of the staff participated actively in the program. Such active participation could only be secured if the time required was small. In other words, how could we get the most out of the program with the least expenditure of time? The program should not seriously be altered if some members were absent from time to time. All discussions and recommendations must be kept brief and on schedule so that members of the clinic might know they could spend, say 30 minutes each week, in the conference room and see all the patients under consideration and hear all recommendations made. In order to accomplish these objectives it was necessary to set up a schedule of doctors to work up the patients before the conference hour. Practically, we open the clinic one hour before the conference and ask two doctors each week to take a brief history and physical examination on the new patients and to examine the old ones. A Dictaphone was placed at their disposal so that notes could be dictated at once. This requires a doctor to work only one-half to one hour every one to two months and he knows in advance which week he is scheduled to work. Following this period of examination the patients are taken to the conference room and presented to the entire group. A director of the clinic or someone appointed by him acts as moderator and keeps the discussion and recommendations in an orderly, rapid, and progressing sequence. The clinic secretary takes down the discussion and writes letters to the referring physician as indicated by the group. Differences of opinion are put to a vote and often the alternate method of treatment is included in the recommendations. The pathologist and radiologists attend the conference and present pathological specimens, microscopic slides and x-rays with their interpretations. At the end of the meeting the group is asked for reports on private cases and any death that may have occurred since the last meeting. After the patients for the day are dis-

**Presented before Ky. Chapter American College of Surgeons Sept. 19 during KSMA 1956 Annual Meeting.*

pensed with, special subjects or rare cases are discussed and these may run into the second 30 minute period if members of the clinic wish to stay. Often the pathologist may review some specific disease which is of interest to the group. In this manner both the run of the mill cancer problems, as well as occasional rare types are constantly reviewed before the staff. In my opinion there is no better method of self education for the doctor.

Now, what is the cancer registry in the hospital and what is its value to patient and doctor? The registry is a system of recording set up to list, classify, and tabulate all cancer cases, both private and charity, in the out-patient and in-patient services of the hospital. It is now a requirement of the American College of Surgeons before a cancer program can be approved. It is a method of reviewing the total hospital experience of cancer on a statistical basis. This does not appeal so strongly to the usual doctor as the direct educational benefit of the program. However, I believe we will all agree that such statistics on a local level can be used with great educational benefit. The time may come when these records may be consolidated on a state and national basis with great benefit to medicine. The American Cancer Society along with the Public Health Service have long worked for such an accurate registry. In any event, we have tried to set up a practical, workable, and accurate registry which will be run along the lines recommended by the American College of Surgeons. The full advantage of this activity will of course not be realized for many years. We feel that the small hospital should make the start now. From a practical point of view our records librarian and her staff can do most of the work on the registry. The system consists essentially of the following: (1) a cancer year book in which every new cancer case is recorded and given a number. These numbers include the number of the year separated by a hyphen and serve to give one the total number of cancer cases on any particular date. A section in the back of the book is reserved for separate malignancies in the same

patient and only the original number is used. The records librarian fills out this book and obtains the list from the completed hospital and out-patient charts along with the weekly pathological reports. (2) An abstract with two carbon copies is made of each new cancer case, one copy going to the Department of Health. This latter saves the doctor the chore of reporting his cases of cancer as required by law. Most of the material on the chart can be transferred to the abstract sheet by the records librarian but she may ask the doctor to assist her in some cases. One copy is filed in the follow-up file and the back used to record the progress and eventually the death of the patient. The record librarian will ask the patient's private doctor for a follow-up note at least once per year. The third copy is filed under anatomical location and serves as a cross-index of disease. Standard nomenclature coding as used in the hospital is used for this file. (3) A master file card is set up in alphabetical order to locate the charts by name. This file is never changed after the original entries.

It can be seen that the records librarian, who is in our case also the Cancer Clinic secretary, is a most important person in the system as outlined. She should be given adequate clerical help to keep the records up to date and assist in the follow-up work. We have been fortunate in having two faithful volunteer workers who come in on clinic days to help with some of the routine work. Our out-patient department nurses in the hospital prepare the patients for examination and move them in and out of the conference room.

Conclusion

A program such as has been outlined is of great value to our staff doctors. We are able to keep the problem of cancer before us at all times and review phases of it that we might tend to forget. We are able to pool our resources in an effort to bring the best possible care to patients with this fearful and dreaded disease in our community.

Ataractic or Tranquilizing Drugs

Phenothiazines, rawolfia alkaloids, and meprobamate comprise a group of drugs which are now classed as tranquilizers. Phenothiazines include chlorpromazine and promazine. The ataractic drugs block subcortical areas. Large doses result in sleep; maintenance doses cause detachment from environment and indifference to symptoms. Vital centers in the brain are not depressed in the usual therapeutic dose.

Phenothiazines suppress emesis. Phenothiazine derivatives seem best in the acutely dis-

turbed individual, while chronic conditions which require long-term therapy seem best managed with meprobamate.

Ataractic drugs have been found to be useful in anxiety states, post-alcoholic syndromes, drug withdrawal, and agitated psychoses. Depressive psychoses may be aggravated. Side effects are common, but usually not of a serious nature. The drugs in this group have opened up new avenues of therapy in many fields of medicine.

Frank H. Moore, M.D.

Epistaxis from Kesselbachs Area or any other accessible point on the nasal septum or turbinates can be controlled in almost every instance by simply injecting 5—lcc of Synasol under the mucous membrane 5-6 mm from the bleeding point. A small cotton pack pressed snugly over the previous bleeding point for 24 hours insures complete hemostasis.

Alvin C. Poweleit, M.D.



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CARCINOMA OF THE COLON AND ITS EARLY DETECTION*

WENDELL G. SCOTT, M.D.

St. Louis, Missouri

Among the laity the colon is the most misunderstood organ in the body. It is the one structure they are certain they know all about. They ascribe all manner of ills to it and prescribe for themselves innumerable home and drug store remedies without the slightest compunction.

This attitude by the laity is disturbing for two important reasons: First, it has given rise to misconceptions about the functions of the colon and about the significance of symptoms caused by cancer and diseases affecting it. Second, it has encouraged self medication and treatment.

These two facts result in delay and in procrastination at a time when a cancer is beginning, is curable and at the time when it can be found by careful examinations. The key to the cancer problem of the colon is, therefore, in the hands of the patients who are over 25 years of age. They must be taught that it is the minor symptoms and the minor changes in bowel habits which give the first warning of an early cancer. These are the symptoms for which he has been accustomed to treat himself, but for which now he must seek medical advice and examination. Only in this way can cancer of the colon be detected in the early, in the operable, and in the curable stage.

Incidence and Location

Cancer of the colon is a common disease. It is the second most frequent of all cancers of the gastro-intestinal tract and is exceeded only by cancer of the stomach. It forms about 7% of all cancers and is the cause of 17% of all deaths from cancer.

Approximately 50% occur in the rectum and sigmoid colon and can be seen by sigmoidoscopy. About 12% of these can be felt by a digital examination. The radiographic examination of the sigmoid is very difficult and requires every effort on the part of the observer to avoid overlooking a small growth. This is the hardest segment to examine radiographically because of the redundant and overlying loops of bowel; yet is the most frequent site for cancers. This

fact explains why an examination of the colon is not complete without a digital exploration, a sigmoidoscopic study, and a comprehensive radiologic examination.

Microscopically about 98% of all types of colon cancers are adenocarcinomas. They begin as a localized growth in the mucosa and remain limited to a small segment of the colon. Consequently, the margins of the cancer begin and end abruptly. This characteristic is a major sign in the radiographic differentiation between malignant growths and inflammatory diseases.

Diagnosis

There is no definite clinical picture in cancer of the colon, yet 97% of these patients will have one or more of these symptoms—any one of which is a sufficient indication for a careful radiologic examination of the colon:

1. Rectal bleeding.
2. Slight changes in bowel habits.
3. Marked constipation or diarrhea or a combination of both.
4. Pus or mucous in the stools.
5. Abdominal distention.
6. Cramping pains in the abdomen.
7. Unexplained loss of weight.
8. Low grade anemia.
9. Hemorrhoids.

Only about ten patients out of every one hundred examined by a radiologist will have a demonstrable lesion of any kind. This is not a disappointment, because the bigger the percentage of negative examinations, the greater will be the chance of finding early cancers, and that is our objective. The referring physicians are learning that they must not wait for the textbook symptoms to develop—that they must recommend barium studies on suggestive symptoms, on suspicion. What can we as radiologists do to combat this disease? Actually, the only thing we can do is to find the early cancers or, better yet, their precursors—in the curable stages. That means we have to find the small tumors and polyps.

Polyps of the Colon

Cancer and polyps of the colon are distributed similarly, are frequently found in the

*Presented before KSMA Annual Meeting On September 18, 1956.

same patient and in the same area, and a certain proportion of grossly benign polyps will show histological malignant changes.

The incidence of polyps is reported from clinics and private offices as 2.6 to 17.2% and in necropsy material as 2.6 to 69% while in surgical specimens removed for cancer of the bowel the incidence is 25% with single and 35% with multiple polyps over the age of 40. Thus, polyps tend to be multiple and when one is located, others should always be searched for. About two-thirds can be seen with the sigmoidoscope and the remaining one-third have to be demonstrated by radiographic means. Most polyps are 1.0 to 2.0 cm. or less in diameter. Unfortunately, about two-thirds of them are "silent" and do not bleed.

There is general agreement that the frank cancer of the bowel was once a polyp, although there is no general agreement as to just what proportion of polyps become malignant. One authority says 20% another 95% depending on their criteria and experience. Nevertheless, one can be certain that any reduction in the mortality from cancer of the large bowel will come from the detection of these tumors before they have become invasive or have metastasized. It is, therefore, the radiologist's business to find as many of them as he can.

Demonstration of Polyps

To do this we must evolve a more accurate and comprehensive technic and assume a highly suspicious attitude that a polyp might be present and that we must look for it. Many radiologists have been doing this and more and more are amplifying their examinations for just this job.

Weber relies on fluoroscopy and his double contrast method for demonstrating polyps, but only when specifically indicated.

Moreton believes that a double contrast study should be done routinely, not only for polyps, but for other lesions.

Garland states that he would not subject 95 to 98% of his patients to the discomfort, hazard and expense of a routine double contrast study for the sake of the other two per cent to five per cent.

Stevenson performed a double contrast examination in 500 patients with histories of bleeding from the bowel, of previous polyps, or polyps seen by sigmoidoscopy and found polyps in 5% of these patients. In two groups of 500

patients without symptoms, he found two polyps, an incidence of 1%. He concluded that a routine double contrast study was not worthwhile except when indicated by the history.

Templeton and Addington routinely combine the single and double contrast studies using their special 3-way valve which permits evacuation of the barium with the patient on the table. By their method they state that polyps less than 1.0 cm. usually escaped detection, which seems to be the experience of most radiologists.

Jones, Kaplan and Windholz were instrumental in developing "BARIDOL," one of the first of the colloidal stable barium suspensions, to give them a better contrast. They use double contrast studies to detect polyps only if specifically indicated.

Christie, Coe, Hampton and Wyatt advocate post evacuation studies and especially those obtained after 1% tannic acid has been added to the barium suspension. They emphasize the value of the post-evacuation film and report that 90% of the polyps in their series were detected on these films.

Swenson and Wigh rely a great deal on spot filming under fluoroscopic guidance supplemented by double contrast studies.

Potter and Gianturco advocate a barium suspension which is made translucent by ordinary voltage or the employment of a denser mixture which is made translucent by high kilovoltage.

Robinson at the meeting of the American Roentgen Ray Society last September presented his method of examination which included "over penetration" films of the filled bowel, followed by a double contrast study if indicated with the examination supplemented by the generous use of "spot" films and the fluoroscopic image amplifier. All of these methods supplement the single contrast examination and are more time consuming and expensive, but not nearly so expensive as a missed diagnosis.

Actually, each of us must evolve a comprehensive technic that will supply his particular needs, be efficient with his particular equipment, fit his time schedule and be properly adjusted to his temperament. I am just as certain that the old single contrast enema with two or three films is as antiquated and as far behind the times as a Model T Ford. Just as the new Ford is the outgrowth of the Model T, so are these present technics the outgrowth of the single contrast enema.

Preparation and Technic

More than ever we appreciate that the clean bowel is probably the most important feature of any study of the colon, and as Robinson has said, "It is second only to the intelligence and diligence of the examiner." To us this means two ounces of castor oil between 2:00 and 4:00 on the afternoon preceeding the examination. Supper that night must be limited to non-residue producing fluids such as clear soups, tea, coffee, fruit juices, grape and apple juice, gelatine, etc. Milk should be specifically excluded. At bedtime and the following morning the patient should take warm saline enemata until the return is clear of feces and castor oil. Breakfast is omitted except for a little tea or coffee. Gianturco and some radiologists even prefer to give the patient a final tap water enema in the radiographic room, but this in our experience, has not been necessary.

It hardly seems necessary to mention that the radiologist should inspect the anal area and really explore the rectum with his finger because these essential examinations are omitted by some physicians even in our times.

We have used BARIDOL, BAROTRAST and BARILOID and found them all satisfactory and resistant to cracking and "alligatoring." However, we have found the Dick X-ray Company I-X Barium mixed in the proportions of one to four by volume about as satisfactory and less expensive. This provides a suspension that is thin enough to employ the "over penetration" technic of Gianturco and yet is sufficiently dense to provide an adequate fluoroscopic image.

After the digital examination the patient is turned into the left posterior oblique position and the barium suspension is allowed to flow slowly by gravity into the colon. This, of course, is done under fluoroscopic control and spot films are made of any suspicious defects or at any place in the colon where there is a hesitation of the barium. When the head of the barium column has passed through the splenic flexure, the injection is stopped and an "over-penetration" film is made. The patient is then rolled back into the right lateral position and a 10 x 12 "over-penetration" film is taken of the sigmoid and rectum. By rotating the patient in the lateral position, it allows the barium to fill the transverse and ascending colon and usually, the cecum without producing over-distention,

this helps to keep the barium from passing through the ileo-cecal valve into the terminal-ileum.

The patient is then turned into the supine position and air is injected into the colon without removing the original enema tip through a special two-way valve. By this means, it is possible to push the barium into the cecum if it hasn't already arrived there. By manipulation, the barium or air can usually be placed in any segment of the colon to be studied and "spot" films made of it. The enema tip is then withdrawn and the patient is now turned over into the prone position and the table is tilted about 30 degrees with the head down. This allows the barium to gravitate into the superior portion of the loops of the colon and the air to shift into the cecum, sigmoid and rectum. The patient is again turned into the supine position and the table tilted to almost the erect position and another film exposed. The patient then leaves the radiographic room and evacuates the barium and air, after which he returns for fluoroscopic observation and if evacuation has been satisfactory, the final film is taken. This amounts to one left posterior oblique over-penetration film, a right lateral over-penetration film, a prone film with head tilted down, a supine film with the patient erect, a prone evacuation film and several spot films.

This procedure is similar to that advocated by Robinson though only two of our films are "over-penetrated" and the fluoroscopic image amplifier is not used.

Conclusion

In conclusion what does all this amount to? It means that any reduction in the mortality rate of cancer of the colon must come about through:

1. Education of the public about the importance of minor changes in bowel habits, rectal bleeding, early medical advice and avoidance of self medication.
2. Convincing the average physician that the best interest of the patient is served by radiographic examinations of the colon on questionable symptoms.
3. Greater effort and energy on the part of the radiologist to find the small cancers and their precursors and the development of a more comprehensive type of examination.



CASE DISCUSSIONS



A CASE OF IRON DEFICIENCY ANEMIA

From the Louisville General Hospital

This ten-months-old white female was admitted to the Louisville General Hospital on 11/22/55 with the chief complaint of vomiting and diarrhea. The history obtained from the child's mother revealed that the baby had been in her usual state of health until approximately two weeks before this hospital admission. At that time the symptoms of a mild upper respiratory infection appeared accompanied by three firm, tender, raised areas behind the left ear. The course of the upper respiratory infection was apparently uneventful but the skin over the postauricular lumps developed the appearance of a weeping eczematoid lesion with satellite vesicles peripheral to it.

This skin lesion responded to appropriate therapy but on 11/20/55 the child began to vomit after every feeding. Her parents noted a fluctuating fever. The vomiting continued until the time of admission. During that interval she retained only one feeding. On the evening prior to admission watery diarrhea was noted and this symptom continued to the time of admission. When seen in the Pediatric Clinic on 11/22/55 the child appeared pale, listless and approximately 5% dehydrated. She was admitted to the Pediatric Service at that time.

The previous history revealed that the child was the product of the tenth pregnancy of her thirty-eight year old mother. It was a full term pregnancy and she weighed 7 lbs. 14 oz. at birth. She was delivered by Caesarean Section done for a placenta previa. The mother's blood loss during labor and delivery was not recorded. The child's weight gain had been satisfactory during her first month of life. Although the child was given supplemental ascorbic acid daily during the first six months of life her diet had consisted solely of an evaporated milk formula (in excess of 1 qt. per day) to the time of admission. Some solid foods had been intro-

duced at six months of age but the child had consistently refused them. Her general health had been good with the exception of Rubella at four months of age. The child's development had been normal to the time of admission. She had received no immunizations.

Physical Examination

The Physical Examination at the time of admission revealed a moderately dehydrated, very pale and fretful white female in no acute distress. The significant additional findings were as follows: A healing eczematoid lesion was noted behind the left ear with associated tender regional adenopathy. The mucous membranes were pale. The spleen tip was palpable and a diarrheal stool was evident. The admitting diagnoses were as follows:

- (1) Dehydration (5%) secondary to vomiting and diarrhea of unknown etiology
- (2) Healing atopic (infantile) eczema
- (3) Feeding problem
- (4) Iron deficiency anemia
- (5) No immunization

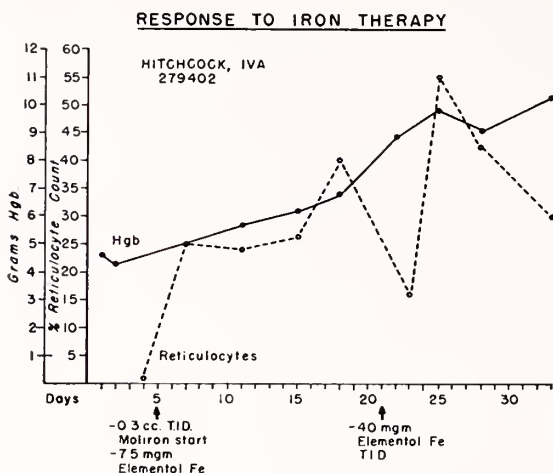
Laboratory Findings

The urinalysis done at admission was within normal limits but the blood count revealed a hemoglobin of 4.5 grams per cent and a white blood cell count of 11,200/cm³ of which 44% were lymphocytes and 56% were segmented polymorphonuclear cells. The reticulocyte count was 0.2%. The blood smear revealed hypochromic microcytic red cells. Blood and rectal and nasopharyngeal cultures were planted and subsequently revealed no significant growth.

Hospital Course

The dehydration was corrected by appropriate parenteral fluid therapy. It was possible to maintain the corrected state of hydration with

oral fluids. The child did not vomit following admission. After the subsidence of the diarrhea (96 hours) iron therapy was instituted (Ferrous Sulfate as Mol Iron Drops® 60 mgm/dose TID between meals). At the same time the



formula was restricted to 4 oz. of skimmed milk 4 or 5 times a day and the normal fluid requirements maintained with water and juices. A polyvitamin supplement was given daily. Cottage cheese and bananas were offered until the child showed evidence of wanting more to eat. At that time (2 days later) a soft diet of green vegetables, lamb, beef, egg yolk and the prepared baby cereals was gradually incorporated into the offerings until the child was receiving a full diet. During this period of time the mother was being instructed in feeding techniques by the pediatric nursing staff. The reticulocyte count had risen to 5% within five days after the institution of iron therapy. Figure 1 depicts the change in dosage of iron (200 mgm Ferrous Sulfate per dose) and the reticulocyte and hemoglobin response. The child was discharged to be followed as an outpatient on 12/23/55. One month later the hemoglobin was 12.7 grams % at which time the child was referred to the Well Baby Clinic to receive her immunization and other normal Well Baby care in conjunction with continued medicinal iron.

® Trade name

Discussion Dr. Little

This child is a typical example of the patient seen for an intercurrent infection whose underlying primary disease is brought to light by thoroughness of a medical history, a complete physical examination and the collaboration of

appropriate laboratory studies. In this case the basic feeding problem and its resultant nutritional deficiency was clearly depicted by the history and confirmed by the physical examination and blood studies.

Tables No. 1 and No. 2 outline the causes of iron deficiency. The history in this particular case reveals a combination of factors. The multiparous state in conjunction with a known placenta previa combine to start the child off with deficient total body iron stores. Unfortunately we were unable to determine the degree of blood loss due to the placenta previa.

It is of interest to note that nearly all cases of iron deficiency anemia in infancy make their clinical appearance between nine months and 24 months of age although they may be earlier or later in a few cases. The physiologic basis for this has been well worked out by Smith and Schulman (1). Apparently the total body stores of iron present at birth are enough to permit the manufacture of adequate hemoglobin up to approximately 16 weeks of age in the normal child. By this time the increase of body mass and its related blood volume is great enough to demand an exogenous iron supply.

Table No. 1
Predisposing Causes of Iron Deficiency

Prenatal factors	1. Maternal Malnutrition 2. Multiparity 3. Twinning
Paranatal factors	1. Premature Delivery 2. Placenta Previa 3. Premature Separation of the Placenta 4. Placental Bleeding into the Maternal Circulation 5. Bleeding from Umbilical Cord

Table No. 2
Postnatal Causes of Iron Deficiency

Inadequate Iron Intake	Dietary Deficiency
Inadequate Iron Absorption	Celiac Disease Mucoviscidosis Giardia Lambl
Inadequate Vitalization of Iron	Chronic Infection
Loss of Iron	Exogenous Bleeding

The introduction of iron containing foods in sufficient quantity at that time will prevent the

development of iron deficiency, the most common nutritional deficiency seen in this country today. Since (1) C. Smith and I. Schulman, *Am.J.Dis.Child.* 87:167-178 (1954) milk does

Table No. 3
Medicinal Iron Preparation

Preparation	Elemental Iron
Elixir Ferrous Sulfate USP	5 cc=50 mgm
Fer in Sol®	0.6 cc=15 mgm
Mol Iron Drops®	0.6 cc=15 mgm
Mol Iron Liquid®	5 cc=50 mgm

® Trade name

not provide an adequate supply of iron, a milk diet is the most common cause of iron deficiency. The clinician can predict the emergence of such a deficiency whenever a child's intake is restricted to milk without a supplementary source of iron. The typical milk baby does receive adequate calories to support normal growth as defined by weight and height alone. The underlying deficiency and its associated psychological feeding problem is often unappreciated in light of the child's normal weight gain and activity. This child is a typical case in point. The problems of therapy are manifold as it is necessary to correct several factors. The apparently simple expedient of giving medicinal iron would fall far short of correcting the situation. Of equal importance is the necessity of instructing the mother about normal dietary requirements and feeding techniques in order to correct the basic feeding problem. In so doing the concepts of normal well child care including the appropriate immunization procedures and routine checks by a physician must be incorporated. Ferrous Sulfate is the best medicinal source of iron. It is available in many trade named forms of equal effectiveness. (table No. 3) The various liquid preparations are of particular value in this age range. The multiple hematinics are not recommended. Basically a child of this age will require between 100 and 200 mgm of elemental iron (or 400 to 800 mgm of ferrous sulfate) daily. Due to the slow absorption of ferrous sulfate from the gastrointestinal tract as well as the known ability of the iron to combine with phosphates and phytates it is appropriate to administer the medicinal iron in at least 3 or 4 divided doses pre-

ferably given between meals. Medicinal iron should not be given with milk or in immediate relationship to meals.

Discussion Dr. Steigman


Dr. Little has emphasized the need for general well child care and parental instruction and support in this and all children with an iron deficiency anemia. These inter-related and equally important needs cannot be overemphasized and cannot be forgotten.

The various technical studies such as serum iron content and total iron binding capacity determination have been of inestimable value in working out the pathology, physiology and pharmacology of iron deficiency anemia. However, they are mentioned here only to emphasize their place in teaching us the background and understanding of this clinical entity, not to suggest a place in the diagnosis or treatment of the usual case of iron deficiency anemia. Far too often the place of the history and physical examination is de-emphasized in their favor. In actuality a blood smear is sufficient to verify the presence of a microcytic hypochromic anemia when used in conjunction with the history and physical examination.

It should be remembered that the proper dietary selection during infancy and childhood is capable of preventing the development of an iron deficiency anemia. The enriched, pre-cooked cereals, egg yolks and red meats are the best dietary sources of iron.

Kentucky ended the past fiscal year with a 5.6 per cent drop in the number of mental-hospital patients. The decline ranked the State in second place in the nation in mental-patient decrease, topped only by the District of Columbia's 5.8 per cent reduction. Frank M. Gaines, M.D., former commissioner of Mental Health in Kentucky, who made the announcement prior to leaving his post, stated that the four State mental hospitals discharged one out of every four of their patients last year. Of the patients discharged, 68 per cent had been hospitalized less than three months and 84 per cent less than a year.

A grant of \$575,000 to evaluate the effectiveness of drugs in treating heart disease has been made by the National Heart Institute to Alan E. Treloar, Director of Research of the American Hospital Association. This is the largest research grant of its kind the Institute has made, according to an announcement by the Public Health Service. The activities of a number of research teams will be coordinated under the grant, with the initial study concerned with the problem of hypertension.



SPECIAL ARTICLES

THE DOCTOR AND HIS MEDICAL ORGANIZATIONS*

W. VINSON PIERCE, M.D.

Covington, Ky.

Physicians are among the busiest of all professional men. None of us has ever dared to dream of a 40 hour work week, to say nothing of the 32 hour week which is the objective of some of the labor unions in our country. Most of us put in 60, 70, 80 or more hours per week at our work, and even so wish that there were more hours in the day.

In spite of this, we find ourselves belonging to numerous, I should almost say innumerable medical societies. I am sure that many of you in this group tonight hold membership in anywhere from 15 to 25 various medical organizations, and take an active part in all of them.

On the other hand, I know several doctors who refuse to belong to the active staffs of the hospitals in which they work; who pay dues to their county medical societies only because they must belong to these in order to purchase malpractice insurance; who never attend their county or state medical meetings, and feel under no obligation whatever to participate in organized medical activities.

Now, who is "missing the boat?" Are we who spend much of our time and energy in medical society work being foolish, or are those who refuse to have any part of such activities depriving themselves of much benefit and pleasure?

To be sure, any of us would find it convenient to withdraw from all medical society work, and to limit our professional time strictly to the care of patients. This would give us many more hours of free time to be with our families, to catch up on our medical and non-medical reading; to attend parties, go fishing or golfing, etc. And yet, I would be reluctant to withdraw from any of the medical groups to which I belong. I know that I have benefitted greatly through

membership in these societies, and I must confess that I have experienced much satisfaction in trying to contribute something—however small—to benefit my profession, through my activities in these groups.

It should be a basic concept for each of us, that we owe a great deal to our profession. We should consider it a privilege to be members of the medical profession. Medicine has been good to all of us, not only in a financial sense, but in the privilege we have of serving our fellow men and in the stimulation which comes to us in trying to keep abreast of progress in one of the most dynamic of all the sciences.

How then can we best repay our debt to those who have bequeathed to us such a noble heritage? First, by being the best doctors we know how to be. Next, by living up to the best concepts of medical ethics. But we must also work to support medical education, both undergraduate and post-graduate. We must resist any and all efforts to substitute third party medicine for our traditional system of medical practice. We must oppose any legislation which would affect the freedom of our practice. These things we cannot accomplish through our efforts as individuals. Through the group actions of our medical organizations, however, we can, with success, continue to oppose those things which are bad and to support those things which are good for us.

Now, from a more selfish angle, what do we expect to gain by belonging to our medical societies? First of all, a chance to keep up with new developments in our profession. Through the scientific papers and talks which we hear at the meetings, our medical education continues down through the years. Show me a doctor who does not go to medical meetings, and

*Presented at meeting of Jefferson County Medical Society Honoring New Members on Oct. 14, 1956.

in most cases I'll show you a doctor who is stagnating. Much of the medicine which we learned in medical school twenty or more years ago is as obsolete as the cars which were being driven at that time. I honestly believe that some doctors have learned most of their medicine for many years, from the drug retail men who call on them.

True, most of the material presented at these meetings will eventually be published in the medical journals, but there is a stimulation in hearing these talks given first hand, which is sometimes lacking when we read the same material in cold print. I think we all learn much at our society meetings from the informal discussions which we have with our colleagues, and in comparing our experiences and results with theirs.

We should not overlook the value of the social contacts we have with our fellow physicians at these meetings. It is difficult to harbor animosity or jealousy toward another when we meet him and converse with him regularly at the medical society meetings. Of course, if he is a "stinker," frequent and intimate contacts will not improve our feelings toward him, but it is surprising how few of our fellow physicians are really "stinkers" after we get to know them better.

How many societies should we join? Each doctor must decide this for himself, and the number will vary from few to many, depending on the scope of the doctor's interests and contacts. The specialist will perhaps wish to join many specialty groups because of the opportunities which these offer for post-graduate education in his field. The general practitioner will probably want to belong to the Academy of General Practice. Local groups, such as the Louisville Medico-Chirurgical Society, or the Louisville Pediatric Society, have their own field of usefulness.

I would like to say just a word about the doctor and his hospital staff appointments. Perhaps it is unwise for a physician to attempt to maintain active staff membership on too many hospital staffs. The joint accrediting committee looks with disfavor on more than two active staff memberships for any physician. The Stover Report to the A.M.A., as you know, disagrees

with this limitation of the number of active staff memberships. Be that as it may, I believe that every physician who has access to the facilities of one or more hospitals in his community, and who uses these facilities for the care of his patients, should have active staff membership in at least one hospital. To refuse to do so because he can secure the privileges he desires, as a courtesy member, without assuming the duties and responsibilities of active staff membership, is extremely selfish.

There are three medical organizations which should be a "must" for every M.D. These are: The County Medical Society, The State Medical Association, and the American Medical Association. We can indeed be proud of our national organization, and of its many accomplishments. There are a few doctors who are more or less willing to belong to our county and and state medical societies, but who do not wish to belong to the A.M.A. either because of the dues involved, or because of lack of understanding and sympathy for its ideals. To those who feel this way (and I hope that the number is small) we would like to point out it is, in no small measure, due to the A.M.A. and what it has stood for through the years, that American doctors have the most enviable type of practice in the entire world. Why then should we not support it?

Our Kentucky State Medical Association is just as vital to our welfare at the state level as is the A.M.A. at the national level. Try to imagine if you can, what the caliber of medical practice in Kentucky would be, if suddenly the K.S.M.A. were completely disbanded. The loss of our medical Journal, and the discontinuing of our annual scientific sessions would remove a large part of the post-graduate and refresher medical education which many of our doctors receive each year. Also try to imagine, if you will, the extent to which chiropractors and other cultists would dominate our medical legislation, if there were no large State Association to exert its influence at the legislative halls in Frankfort. Even our most selfish and indifferent physicians would not want to give up these advantages.

The most important of all of our medical societies, in the final analysis, are our county medical societies. Without these the larger state

(Continued on Page 184)



EDITORIALS



THE PHYSICIAN, TOO, HAS SOME RIGHTS

THE PAST TWENTY YEARS has been a period of trial for the medical profession. Economic changes have been rapid and unexpected and, like men in every other business, or profession, physicians have had to make repeated adjustments. The trend toward socialization in all walks of life has been emphasized. In medicine particularly, we have very wisely, and with considerable success to date, resisted such change but what the future holds no one can accurately predict.

It is difficult to understand why so much adverse criticism has been leveled especially at the medical profession during this era of change and upheaval. The rapidly increasing cost of medical care has unjustly been charged by some to the practitioners of medicine. A recent analysis of incomes in various groups has shown that the physician's income, on an average, has increased far less than the general cost of medical care. In fact, the physician's income has increased less than the income of the average workman, either skilled or unskilled, or the average members of any other profession.

In attempting to meet and fairly answer the criticism directed toward us, the entire medical profession has undergone a period of soul searching, which, on the whole, has been beneficial. We have been quite ready to admit our faults and shortcomings and those of our fellow practitioners. In fact, it often seems that we have gone overboard in admitting or accepting harsh and unjust criticism. It has become the practice for physicians in addressing medical or other assemblies to acknowledge freely our deficiencies as a profession—always seeking, however, to find some remedy or improvement.

Unfortunately, when such an admission is made in public utterance there is nearly always a member of the press present and he is most likely to overemphasize this type criticism and

may completely ignore the much greater time and effort given toward the advancement of constructive suggestions.

After all, ours is still perhaps the most honored and respected profession of all—excepting perhaps the ministry and teaching. The core of public criticism appears to be that while rendering excellent service to humanity we manage to be well paid for it. Little thought is given to the long period of preparation, usually carrying the physician to the age of 30 before he is able to earn a subsistence; and little attention is paid to the fact that the work of the physician requires unusually long and irregular hours and the carrying of a heavy load of responsibility for his patients' welfare.

The physician is supposed to be a man of high education, culture and refinement at the time he begins to practice medicine and he should increase these qualities as the years go on. If he chooses, or is able to take a prolonged vacation or travel abroad in the pursuit of wider education and culture, medical or non-medical, that should be his privilege and there is no reason why he should be criticized for it. If he is able to drive an expensive car that, again, is his own affair. He will not be able to drive it very often or very far, apart from the pursuit of his daily routine. If he desires to provide for his family and friends a comfortable or even a luxurious home, that even is his business. If he purchases and affords its upkeep, he will not be able to spend very much time enjoying it personally—but if his family and friends can enjoy it, so much the better. If he is inclined to build for himself a little imaginary castle, let him do so. If he meditates there on occasion it will do him no harm and may do his clientele some good. He will not do so very often or very long because the cruel winds of adversity will soon blow it down about him and he will be wiser for the experience.

There are always some charlatans, profiteers

Opinions expressed in contributions to *The Journal* are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

and misfits in every field of endeavor. The medical profession has, in the past, attempted to weed out and exclude these men from its membership and will continue to do so. We may well emulate the example of our distinguished

predecessors and pay less regard to adverse criticism and be less sensitive to the vagaries of our public, practicing the acknowledged high standards of our profession in courage and humility, and without apology.

Sam A. Overstreet, M.D.

THE LUCID INTERVAL

TODAY WE ARE CONFRONTED with conflicting ideologies and the insecurity of unlimited and powerful destructive forces which are as yet unharnessed. Social man has failed to keep pace with his scientific brother and this demise has divorced a potentially synergistic relationship. With the advancement of civilization, man becomes subjected to an ever increasing number of influences which hold him accountable to society and to government.

He is accosted by an ever increasing difficulty in the application of individual liberties. An overwhelming amount of information is being thrust upon us by communicative media and interpretation becomes more hazardous. It is an axiom in medicine that you can never diagnose a disease if you are unaware of its existence; likewise neither you nor I can prescribe a therapeutic regimen if we are unable to recognize the signs and symptoms of the dissolution of our freedom.

Society advances and man is proud of his accomplishments, but like the vacillating ass we tend to drag in places. Because it has so often been forced to the rear, education nurtures one of the sorest spots. The educational policy as presented dictated to a student in his particular field of endeavor, is a rather bold attempt to make lasting friends from a very short acquaintance.

This has been a relatively tenable program in the past but is an abbreviated concept of the pressing needs of today and tomorrow. This can only be accomplished by an educational system which is not satisfied with a mere transference of acceptable knowledge; but more important, one which instills a desire to learn into the mind of each student.

Mental inertia in the young is directly attributable to an educational challenge of limited

conception. We continue to underestimate the ability of the mind of a child and also, fail to delineate intellectual divisions of academic learning as related to ability. The cerebral apathy in the adult is purely a lack of self engendered enthusiasm for knowledge. We are now aware of the false premise relative to advancing age and ability to learn. Until we learn that there must be a continuous flow of intellectual activity from birth until death, we will never be able to surmount the complex problems which lie ahead. We must transcend the functional climacteric which takes place in the "halls of ivy" each June.

The continued education of adults, to be properly exercised, must become an integral part of a gainful day. An occasional extension course is of value, however, it will not supplement nor nourish spirited intellectual inquiry. There are no broad spectrum antidotes for mental lethargy. When we, as adults, realize that age is a God given privilege and not an excuse, we will then be on the threshold of a rare experience.

The most significant discovery man can make in a lifetime is man himself. The brain is the symposium of history—past, present and future. The accuracy of its translation is dependent upon the intrinsic wisdom and the basic integrity of man. Herein lies the opportunity for fusion of thought and action which, when properly joined, can propagate an enlightened community of man.

We either accept the challenge, awake and move forward, or retreat to slumber in the illicit fantasy of mental inanition. To assure the survival of freedom, we must not become inebriated with security nor seduced into an acquiescence of thought for there is no shorter route to conformity of expression and action. To know this is to realize that we may well have embarked upon our last lucid interval.

Porter Mayo, M.D.



ORGANIZATION SECTION



Experts Will Speak April 4 to County Society Officers

Acceptances have been received from some of the nation's top advisors in the field of legislation and medical economics to appear on the program at the Seventh Annual County Society Officers Conference at the Phoenix Hotel, Lexington, on Thursday, April 4, states KSMA President Richard R. Slucher, M.D.

"In addition to a distinguished roster of speakers, the conference will provide ready assistance to strengthen organized medicine in Kentucky at the most important phase of its activity—the local level," said Doctor Slucher. He urged the attendance of county officers and committee chairmen as a virtual "must" and emphasized that all KSMA members are cordially invited.

Among out-of-state guests scheduled to speak at the Conference are the following.

L. W. Larson, M.D., Bismarck, N. D., member of the AMA Board of Trustees, the AMA Council on Scientific Assembly, and a past president of the American Society of Clinical Pathologists, will speak on the general subject of physicians' participation in labor management health plans. Doctor Larson is a past president of the North Dakota State Medical Association and has held office at the national level in the American Cancer Society, Committee on



Dr. Larson

Blood, and the Rural Health movement, and is presently chairman of the Commission on Medical Care and of the Task Force on Socio-Economic Policy.

Ralph C. Eades, M.D., Valparaiso, Ind., has attained national recognition for his work in getting



Dr. Eades

organized medicine to sponsor science fairs. He promotes scientific study among high school students to develop strong scientific interests that will lead to advanced medical study. Doctor Eades holds membership in national and international groups in the fields of Proctology, Geriatrics, General Practice, Science Advancement, Military Surgeons, and American Physicians and Surgeons.

C. Joseph Stetler, Chicago, director of the AMA law department, will discuss medicine's new approach to national legislation. A native Indianan Stetler holds an LL.M. degree from Catholic University, Washington, in the Class of 1940. A former secretary to the Committee on Legislation of the AMA, he has also worked with the Civil Service Commission, Social Security Administration, Veterans Administration and the War Claims Commission.



C. J. Stetler

Attention: County Societies

County medical society secretaries who have not sent in their reports listing the names of new officers and committees to the Headquarters Office at 620 South Third Street, Louisville, are urged to do so at once, according to Richard R. Slucher, M.D., Buechel, KSMA president.

In making this urgent request, it was explained that it is necessary to have this information in order to send the new officers and committeemen invitations to the County Society Officers Conference which will be held in Lexington on Thursday, April 4.

The KSMA is Growing

A KSMA membership report as of December 31, 1956 shows 2002 active members as compared with 1948 for the previous year and 1905 at the end of 1954. Active AMA members are listed as 1725 for 1956, 1656 for 1955, and 1591 for 1954. The report also shows a steady increase in the number of Kentucky physicians, from 2330 at the end of 1954 to 2429 on December 31, 1956.

NATIONAL CONFERENCE ON RURAL HEALTH SET FOR MARCH 7, 8, & 9

Conference Theme: "Together We Build"

**Thursday, Friday
and Saturday**

**Brown Hotel
Louisville, Ky.**

PROGRAM

Thursday Morning, March 7

CARL S. MUNDY, M.D., Presiding

8:00 Registration

10:00 Opening Service

Community Singing

C. E. ALLEN, Supt.

John Little Presbyterian Centers, Louisville

Invocation

REVEREND FRANK H. CALDWELL,

President, Presbyterian Seminary, Louisville

Greetings

HON. A. B. CHANDLER, Governor

HON. J. ANDREW BROADDUS, Mayor
of Louisville

GEORGE F. LULL, M.D., General Manager,
AMA

11:00 Together We Build

F. S. CROCKETT, M.D., Chairman Council
on Rural Health, AMA

11:15 Today's Medicine

AUSTIN SMITH, M.D., Editor Journal of
the AMA

11:40 How We Deliver Today's Medicine to Our Patients

JULIUS MICHAELSON, M.D., Chairman
Committee on Medical Service and Public
Relations

Alabama State Medical Assn., Foley, Ala.

12:15 Recess

Thursday Afternoon, March 7

F. A. HUMPHREY, M.D., Presiding

2:00 Community Singing

2:05 Problems and Progress in Medical Education

EDWARD L. TURNER, M.D., Secretary
Council on Medical Education and Hospi-
tals, AMA

2:25 Problems of Medical Schools

J. MURRAY KINSMAN, M.D., Dean of
Medicine, U of L, Louisville

2:50 I'm Heading for the Country

CHARLES BUSH, M.D., Kirkland, Ind.

3:10 Milk Break

3:20 Contents of the Doctor's Black Bag

W. WYAN WASHBURN, M.D., Chairman
Committee on Rural Health and Education
North Carolina State Medical Society, Boil-
ing Springs, N. C.

4:00 Discussion Period

5:00 Recess

Thursday Evening, March 7

F. S. CROCKETT, M.D., Presiding

8:00 Recreational Program

Community Kaleidoscope

Jefferson County Recreation Bd.,

CHARLES VETTNER, Director

Tennessee Cane and Rope Jumpers

Courtesy Tenn. Farm Bureau Federation,
Columbia, Tenn.

Friday Morning, March 8

9:00 Community Singing

9:05 Dental Health and Farm Families

W. R. ALSTADT, D.D.S., President-Elect,
American Dental Assn., Little Rock, Ark.

9:40 Discussion

10:15 Milk Break

10:25 Migrant Agricultural Workers and the Rest of Us

OTIS L. ANDERSON, M.D., Assistant Sur-
geon General Chief, Bureau of State Services
Public Health Service, Washington, D. C.

10:50 Medical Care for Migrant Agricultural Workers

VIRGIL N. SLEE, M.D., Hastings, Mich.

11:15 Discussion

12:00 Recess

Friday Afternoon, March 8

WILLARD A. WRIGHT, M.D., Presiding

1:30 Community Singing

1:35 Economic Situation in Agriculture

J. CARROLL BOTTUM, Assistant Head
Agricultural Economics, Purdue University,
Lafayette, Ind.

2:15 The Why In Hospital Costs

MARY SCHABINGER, Detwiler Memorial
Hospital, Wauseon, Ohio

2:40 The Role of the American Hospital Association in
Providing Financial Support for Hospitals

MADISON B. BROWN, M.D., Director,
Administrative Services, American Hospital
Association, Chicago, Ill.

3:05 Rising Costs of Medical and Hospital Insurance

CARL S. MUNDY, M.D., Vice-Chairman,
Council on Rural Health, AMA, Toledo,
Ohio

3:35 Milk Break

3:45 Discussion Period

4:30 Recess

Friday Evening Banquet Session, March 8

F. S. CROCKETT, M.D., Presiding

7:00 Banquet

Introduction of Special Guests

Greetings

Woman's Auxiliary, AMA

MRS. ROBERT FLANDERS, President
Manchester, N. H.

Student American Medical Association

ROBERT G. OVERSTREET, President
University of Louisville Chapter

Musical Interlude

PHYLLIS AND FOREST HEEREN
Louisville

Changing Scenes in Rural Health

L. E. BURNEY, M.D., Surgeon General
Dept. Health, Education and Welfare
Public Health Service, Washington, D. C.

Saturday Morning, March 9

GEORGE F. BOND, M.D., Presiding

9:00 Community Singing

9:05 Rural-Urban Problems

LOUIS A. WOLFANGER, M.D.
Professor of Soil Science, Specialist in
Land Use, Michigan State University
East Lansing, Mich.

HARRY WAIN, M.D., Health Commissioner,
Richland County, Mansfield, Ohio

10:35 Break

10:45 Rural Aspects of the Problems of the Aging

H. B. MULHOLLAND, M.D., Chairman
Committee on Aging, AMA,
Charlottesville, Va.

11:10 Together We Build

JOSEPH ACKERMAN, Managing Director
Farm Foundation, Chicago, Ill.

11:30 "And Away We Go"

MRS. CHARLES W. SEWELL
Member-at-Large, Advisory Committee
Council on Rural Health, Otterbein, Ind.

11:45 Adjournment

RH Conference Expected to Draw Record Attendance

Governor A. B. Chandler and Louisville's Mayor Andrew Broadus will help to welcome visitors from over the United States to the National Rural Health Conference, to be held at the Brown Hotel in Louisville on March 7-9.

Representatives will come from the National Council's 45 member-states, comprising nine active regions. Weather conditions permitting, the 700 attendance goal is expected to be exceeded. Car pools are being organized all over Kentucky to bring interested health patrons.

The Kentucky RH Council and the KSMA Committee on Rural Health, both headed by Wyatt Norvell, M.D., New Castle, are cooperating with the National RH Council in program planning and attendance promotion.

The Conference will be a down-to-earth meeting. It has been planned for all persons interested in rural

life. This includes preachers, doctors, teachers, farmers and homemakers. Many allied organizations in the Commonwealth, which have worked wholeheartedly with the KSMA to stimulate a progressive health attitude ever since the Kentucky RH Council was established in 1951, are working toward the success of the Conference.

RH Council to be Guests of Jeff. Co. Med. Society

The AMA Council on Rural Health, composed of ten nationally-known physicians, will be luncheon guests of the Board of Governors and the Rural Health Committee of the Jefferson County Medical Society during the National Rural Health Conference in Louisville, March 7-9, according to David M. Cox, M.D., Louisville, chairman of both Society organizations.

The AMA Council, in its efforts to raise the health standards of the rural people of America, works with an advisory committee made up of ten lay people who represent the American Farm Bureau, the National Grange, the Farm Foundation, the farm press, home demonstration groups and the agricultural extension services.

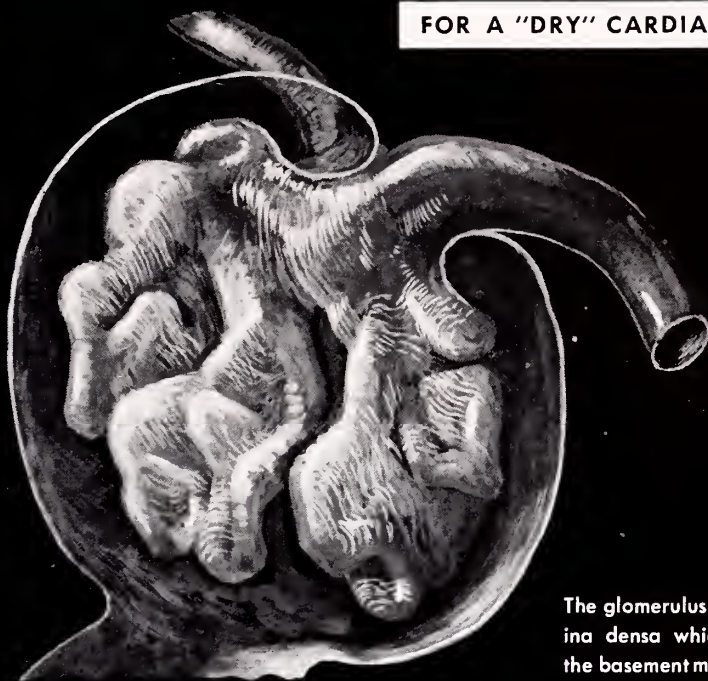
One of the chief activities of the Council is to make available the opportunity for the exchange of ideas among rural health leaders. Annual conferences provide the major nation-wide outlet. Here rural people tell what they want and expect in the way of health helps and they suggest ways to improve medical care in their particular areas.

The conferences also provide doctors with the opportunity to advise on medical needs and services in the agricultural areas. Their discussions cover a wide variety of health phases, including insurance, hospitals, preventive medicine, education, mental health, care of the infant and the aged.

The American Medical Education Foundation has completed its fifth year of operation with a record total of \$1,072,717 in contributions. This is a 41 per cent increase over last year's total. Grants to the country's 83 medical schools will be made soon, according to Foundation offices in Chicago. The Foundation was created in 1951 and reports show that its funds have served as a stimulus to further contributions to the medical schools from all sources.

The U.S. Atomic Energy Commission has announced the awarding of 59 life science research contracts in the fields of medicine, biology, biophysics and radiation instrumentation. Kentucky did not share in the awards. The contracts were made to universities and private institutions as part of the AEC's continuing policy of assisting and fostering research in fields related to atomic energy.

FOR A "DRY" CARDIAC PATIENT . . .



The glomerulus is invested in the lamina densa which is continuous with the basement membranes of the outer capsular epithelium.

Illustration by Hans Elias

Rolicton® Diuresis Maintains Continuous Edema Control

The efficacy of Rolicton (brand of amismetradine) in maintaining diuresis in the edematous patient has been established on an average dosage of one tablet b.i.d. Larger doses may be given as initial therapy and as maintenance therapy in edema difficult to control. Many patients will respond to one tablet daily.

"The margin of safety and the diuretic index is certainly an improvement over the use of oral mercurial diuretics."¹

Avoiding "Peaks and Valleys"

A highly desirable effect, and one which has been made possible with Rolicton, is the maintenance of continuous diuretic effectiveness day after day over an extended period, to avoid the up-and-down weight pattern typical of other edema-control methods.

"There was an obvious stabilization of weight in practically all of the patients under observation, and previous wide fluctuations in poundage disappeared."²

Mercury-Sparing

Typical of the Rolicton diuresis pattern is the ability of the drug to reduce and, in a large percentage of patients, to eliminate the need for mercurials parenterally.

"... the drug represents a most useful addition to our armamentarium in the treatment of edema, not only because it can be given orally ... but more so because it permits [us] to replace or to spare the ... mercurials."³

G. D. Searle & Co., Chicago 80, Illinois.
Research in the Service of Medicine.

1. Asher, G.: Personal communication, June 23, 1956.
2. Settel, E.: A Clinical Evaluation of a New Oral Diuretic, Rolicton, *Postgrad. Med.*, Feb. 1957, in press.
3. Goldner, M. G.: Personal communication, June 29, 1956.

SEARLE

Post Graduate Seminar Will be at Harrodsburg, March 14

Harrodsburg's Second Annual Post Graduate Seminar will be held at Beaumont Inn, on Thursday, March 14. A strong afternoon and evening scientific program will be featured.

This is one of several annual seminars held in various parts of the state under the sponsorship of the KSMA Committee on Post Graduate Medical Education, in close cooperation with the University of Louisville School of Medicine and the Kentucky Academy of General Practice, according to Garnett Sweeney, M.D., Liberty, committee chairman.

While all KSMA members are welcomed, members in thirty South-Central Kentucky counties will receive special invitations.

The afternoon program includes three scientific presentations, beginning at 2:00 o'clock: "Diagnosis and Treatment of Childhood TB," by W. C. Adams, M.D., assistant professor of child health at the University of Louisville; "Stroke," by Richard C. Turrell, M.D., assistant professor of neurology, U of L; "Treatment of Hemiplegia," Rex O. McMorris, M.D., associate professor and chairman of the department of physical medicine and rehabilitation, U of L.

Following a dinner at 6:30 in the evening, Beverly P. Towery, M.D., professor and chairman of the department of medicine, U of L, will present an essay on "Acute Thyroiditis."

February Draft Call to Take Eight Ky. MDs

Approximately eight physicians, under the age of 37, will face a call to military service in February through Selective Service, according to A. Clayton McCarty, M.D., Louisville, chairman of the Kentucky Advisory Committee to Selective Service.

The Kentucky group will be a part of the 450 physicians called through the Selective Service System next month. The Army is slated to get 250 new physicians and the Air Force 200. This is the largest call since March 1955, when the Army, Navy and Air Force inducted 1275 physicians.

When asked to review the role of his Committee in the matter of calling physicians into the Military, Dr. McCarty stated it served in an advisory capacity to both Selective Service and the reserve components of the military services. The purpose of the committee is to advise on the eligibility of physicians facing a call, and to prevent communities from being left without adequate medical services.

The Chairman said that any community that was about to lose its doctor and who felt the doctor was essential to the health and welfare of the community and ought to be deferred, should have the physician in question ask the calling authority to have his case reviewed by the Advisory Committee. As soon as that authority, whether the Selective Service or a reserve component, contacted his committee, it would investigate the case at once and make its recommendations promptly.

Specialty Group Heads Plan for Annual Meeting

Paving the way for outstanding scientific sessions at the 1957 Annual Meeting, presidents of various scientific groups held a planning meeting at the Brown Hotel on January 24.

Richard R. Slucher, M.D., KSMA president and chairman of the Committee on Scientific Assembly and Arrangements for the 1957 Meeting, presided at a discussion of plans for participation in specialty group sessions on Wednesday afternoon, September 18. The Annual Meeting will be held September 17-19.

Invited to attend the planning session were: Marion G. Brown, president, Kentucky Orthopedic Society; Alfred T. Wagner, M.D., president, Kentucky Chapter Anesthetist Society; E. R. Gernert, M.D., president Kentucky Chapter American College of Chest Physicians; Harry S. Andrews, M.D., president, Kentucky Chapter American Academy of Pediatrics; Sam A. Overstreet, M.D., governor, Kentucky Chapter College of Physicians.

John P. Bell, M.D., president, Kentucky Psychiatric Association; Harry K. Dillard, M.D., president, Kentucky Public Health Physicians; David Shapiro, M.D., president, Kentucky Radiological Society; Robert A. Orr, M.D., president, Kentucky Obstetrical and Gynecologic Society; W. O. Preston, M.D., president, Kentucky EENT Society; R. Arnold Griswold, M.D., president, Kentucky Chapter American College of Surgeons; Julian B. Cole, M.D., president, Kentucky Chapter American Academy General Practice.

Chest Disease Symposium to be at London Hospital Feb. 27

A symposium on Chest Diseases will be held at District Five State TB Hospital, London, on February 27, according to C. C. Howard, M.D., chairman, State Tuberculosis Hospital Commission. The scientific essays to be presented include:

"Diagnosis and Treatment of Pulmonary Surgical Condition," by Nathan Levene, M.D., thoracic surgeon, Louisville;

"Synopsis of Pulmonary Function Studies in a 100-Bed Tuberculosis Hospital," James Gilboy, M.D., medical director of Julius Marks Sanatorium, Lexington;

"Dynamics of the Tubercle," a color-sound film will follow the essays.

UL Gets \$200,000 Trust Fund

A \$200,000 trust fund for surgical research in the University of Louisville School of Medicine is being set up by John W. Price, Jr., M.D., retired Louisville surgeon, and Mrs. Price. This announcement has been made by Philip Davidson, Ph.D., University president.

One of the largest gifts ever received by the University for academic purposes, income from the fund is to be used to provide assistants and research fellows, and supplies and equipment in the Surgical Research Laboratory at the Medical School.

Dr. Gaither Will Retire From Practice, Plans to Write

Gant Gaither, M.D., Hopkinsville surgeon and immediate past president of the KSMA, has announced his retirement from practice. A part of his time will be devoted to writing.

The 72-year-old Hopkinsville native was graduated from the Medical School of the University of The South, Sewanee, Tenn., in 1907, as president and valedictorian of his class. He began his medical practice at Arcola, Miss.

After several years of general practice, he took additional training at Oxford, Miss., changed to surgery and established a practice at Hopkinsville in 1912. He was the city's only surgeon. During the ensuing years, Dr. Gaither's practice has embraced from eight to ten counties in Western Kentucky.

President of the Jennie Stuart Memorial Hospital the past fifteen years, Dr. Gaither's public interests have also included long activity in the Grace Episcopal Church, service as bank director at Hopkinsville and military duty in World War I. Several new industrial-chemistry processes are credited to his inventive talent. One of his chief interests is in the journalistic field.

Council Sends Congratulations on Academy Anniversary

Congratulations were expressed by the KSMA Council at its December 13 meeting to the Cincinnati Academy of Medicine on its one hundredth anniversary, and best wishes offered for the success of its Centennial Exposition, Feb. 27-March 5.

Edward B. Mersch, M.D., KSMA president-elect, and W. Vinson Pierce, M.D., both of Covington, were unanimously elected as KSMA's official representative to the Exposition.

The Academy is the pioneer medical society in Southern Ohio. It will highlight the Exposition with a Health Museum at Cincinnati Music Hall. One hundred and seventy-five health and scientific exhibits will be on display.

The ribbon-cutting ceremony will be conducted by Governor William O'Neil of Ohio at 9 A.M. on Wednesday, February 27. Paul Dudley White, M.D., Boston, and Walter Alvarez, M.D., New York City, will be among the guest speakers. Sir Edward Appleton, Noble Laureate, of Edinburgh, Scotland, will deliver the Convocation address the last night of the Exposition.

Selection of Physicians, Hospital Organization Are Basis of Accreditation Rules

In assuming responsibility for medical functions of a hospital, delegated by the hospital's governing body, the medical staff must be self-appraising and self-regulatory, according to Kenneth B. Babcock, M.D., director of the Joint Commission on Accreditation of Hospitals.

The Commission's Standards for Hospital Accreditation require constant analysis of the hospital's clinical work, he states, based on (1) selection of physicians for staff appointments and hospital privileges, and (2) effective hospital organization.

In appointing staff physicians, the Commission's call for adherence to these principles: that a license is only a legal, not a moral right and does not guarantee competence; that privileges are to be extended in the fields of general medicine, surgery, pediatrics, obstetrics, gynecology and other specialties according to experience, judgment, ability and competence; that selection be made on merit and under no circumstance be dependent alone upon certification of specialty societies.

Proper analysis and clinical review also depend upon effective organization of the medical staff and its active committees, including the Medical Records Committee, to supervise and appraise medical records; the Tissue Committee, to report on pre-operative, post-operative and pathological diagnoses, and on the justification of surgical procedures; and the Credentials Committee, to review applications for appointment, delineate privileges and make recommendations.

The Commission reaffirmed its stand that responsibilities of the General Practice Department are not those of a clinical service, and that this department shall be limited to administration and education. Its members shall have privileges in the clinical services of other departments in accordance with their experiences and training, upon recommendation of the Credentials Committee and shall be given such administrative responsibilities as desired to meet hospital needs.

The establishment of a GP department in every hospital where feasible, was recommended by the Commission, with generalists on the hospital staff initiating action to create the department. The GP department should have fair representation in staff activities, and the generalists given privileges according to training, ability and competence. The Commission considered a well-functioning GP department an attribute to the hospital.

Member organizations of the Joint Commission on Accreditation of Hospitals are: American College of Physicians, American College of Surgeons, American Hospital Association, American Medical Association and the Canadian Medical Association. The full text of Dr. Babcock's statement is on file in the KSMA Headquarters office, 620 South Third Street, Louisville. A copy of it will be made available upon request.

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT

1957 Annual Meeting

Kentucky State Medical Association

Columbia Auditorium

Louisville, Kentucky

September 17, 18, 19

Fill Out and Mail to:

EVERETT L. PIRKEY, M.D., Chairman

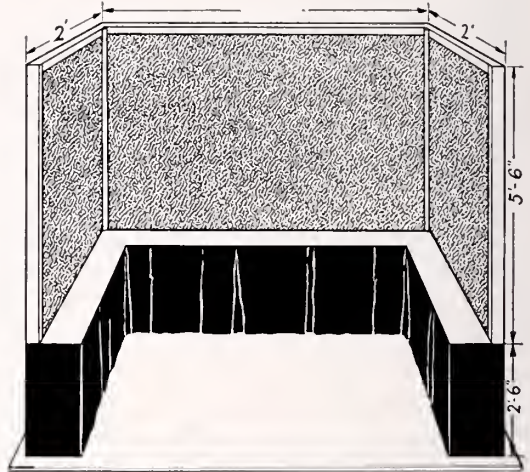
Committee on Scientific Exhibits

Louisville General Hospital,

Louisville 2, Kentucky

(Applications for space should be received
before July 1, 1957)

Dimensions and structure of K.S.M.A. Scientific
booth are shown in accompanying illustration



1. Title of Exhibit:
2. Description or nature of exhibit: (Attach brief description to this blank).
3. Will you require shelf space?
4. Give approximate amount of wall space needed. (Included in total space is two side walls of two feet in length)
5. Name of institution co-operating in the exhibit (if desired)
6. Name of exhibitor:
- (Street & No.) (City)

The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.

Five Councilor Districts to Hold Meetings in April

Five of the fifteen KSMA Councilor Districts will hold their annual meetings during the month of April. Richard R. Slucher, M.D., KSMA president, is scheduled to speak at all of them. The March issue of The Journal will carry more detailed information concerning the programs.

The April Councilor District calendar is as follows: the Fourteenth District meeting will be held at Pikeville, Wednesday, April 10, Charles C. Rutledge, M.D., councilor; the Thirteenth will meet at Ashland, Thursday, April 11, Charles B. Johnson, M.D., councilor; the Sixth District will convene at Franklin on Tuesday, April 23, L. O. Toomey, M.D., councilor; the First at Paducah, Wednesday, April 24, J. Vernon Pace, M.D., councilor; and the Second at Henderson, Thursday, April 25, Walter L. O'Nan, M.D., councilor.

Members of each individual district will receive a personal invitation and other data on the meeting well in advance of the session, according to the councilors involved.

Dr. Howard Attends Polio Vaccine Meet in Chicago

C. C. Howard, M.D., Glasgow, Chairman of the KSMA Advisory Committee on Public Health, was appointed KSMA official representative to a national meeting in Chicago on January 26, spearheading the polio vaccination program.

The meeting was sponsored by the American Medical Association, with the primary purpose of stimulating the development of state and local campaigns to encourage all persons under age 40 to be inoculated with poliomyelitis vaccine.

The AMA has released specific conclusions on the vaccine program, reached in Washington January 5: (1) polio vaccine is safe and effective, (2) all under 40 should be encouraged to be vaccinated, (3) inertia and apathy were responsible for the failure of many to be vaccinated, (4) the medical profession should go "all out" to promote the vaccine, (5) medical organizations should assume leadership in such a campaign, (6) the AMA, with state and territorial associations, should spearhead the campaign.

KSMA President Richard R. Slucher states that "it is very timely on the part of the AMA to launch this effort and we urge the citizens of Kentucky, especially those under 40, to be inoculated."

Medical Foundation Officers Include KSMA Members

William H. Skinner, Lexington, was elected president of the Kentucky Medical Foundation at its annual meeting on December 15. A vice president of the Kentucky Utilities Company, Skinner succeeds J. Stephen Watkins, Lexington.

KSMA members elected to the office of vice-president were: Daniel C. Elkin, M.D., Lancaster, Francis M. Massie, M.D., Lexington, Sam Overstreet, M.D.,

Louisville. KSMA President Richard R. Slucher, M.D., was named a director to the foundation. Re-elected as directors were Coleman Johnson, M.D., Lexington, J. Farra Van Meter, M.D., Lexington, Branham B. Baughman, M.D., Frankfort, and Virgin Kinnard, M.D., Lancaster.

The Foundation approved the establishment of a committee to work with the University of Kentucky on a public relations program for the UK Medical Center. William Willard, M.D., dean of the UK Medical School, gave a progress report on the school. He stated that more federal aid could be expected for construction work, in addition to the \$1,208,992 recently received from the National Advisory Council on Health Research Facilities for a medical sciences building.

Hunter's Fall Meet to Be at Mitchell, S.D., Oct. 1957

The Hunter's Fall Medical Meeting sponsored by the South Dakota State Medical Association will be held at Mitchell, South Dakota during the first five days of pheasant hunting season in October, 1957.

The program is set up for out-of-state doctors and will feature morning scientific sessions, afternoon hunting and evening scientific and social sessions.

The registration fee is set at \$100 which will cover the out-of-state hunters license, hunting guides, reserved hunting areas, several social events, and the scientific program. Motel and hotel space has been reserved, but registration is limited to the available housing.

The affair is not stag, but wives who hunt must pay the full registration fee and those not hunting, three-fourths of it. (This is necessitated by the tight housing situation.)

For details and reservations write to Mr. John C. Foster, Executive Secretary, South Dakota Medical Association, 300 First National Bank Bldg., Sioux Falls, South Dakota.

Jeff. Medical Society Opens Business Bureau

The Medical Society Business Bureau, created by the Jefferson County Medical Society, has been set up at the society's headquarters office to collect medical bills and explain the cost of medical care, according to Irvin Abell, Jr., M.D., society president.

This business bureau, which will serve upon request, both the medical profession and the public, will have its own director-manager and a five-doctor board of trustees. Its incorporators are Dr. Abell, John S. Harter, M.D., society president-elect, George W. Pedigo, M.D., Homer Martin, M.D., and Arthur T. Hurst, M.D.

In addition to collecting delinquent accounts for physicians, the bureau will act on their behalf to explain the cost of medical care, determine patients' ability to pay, and eventually help doctors in the business side of their practice. The bureau's fees will correspond to that of private collecting firms.

*the hero
of the hill
gets his reward*



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The pain Dad feels now is the beginning of tenosynovitis. With adequate early treatment he'll be able to stay on his job. Delaying therapy might result in the development of effusion and, later, calcification of ligaments or even peri-arthritis with severe pain and serious restriction of movement.

Immediate antirheumatic therapy is to be encouraged in the treatment of tenosynovitis, as it should be in the majority of other common rheumatic disorders, to alleviate pain and prevent progression of the disturbance to a point of irreversible damage.

SIGMAGEN provides doubly protective corticoid-salicylate therapy—a combination of METICORTEN® (prednisone) and acetylsalicylic acid giving additive anti-rheumatic benefit as well as rapid analgesic effect. These benefits are supported by aluminum hydroxide to counteract excess gastric acidity and by ascorbic acid, the vitamin closely linked to adrenocortical function, to help meet the increased need for this vitamin during stress situations.

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who go beyond
their physical
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STUDENT AMA

I would like to thank Mr. Overstreet, president of the Louisville Chapter of SAMA, for relinquishing this space to me in order that I might introduce to and familiarize the profession with the Christian Medical Society.

The Christian Medical Society is a national organization that is represented in practically every medical school in the United States. The Louisville Chapter of CMS was founded by a small but sincere nucleus in May 1951. Since that time CMS has progressed and expanded its activity. The result of such efforts is the present organization, of which each member can be proud.

The purposes expressed by CMS are manifold and include: a desire to uplift the spiritual, ethical, and professional standards of the medical profession; encouragement of Bible study, prayer and fellowship; and the presentation of a positive witness of Jesus Christ to our associates. In summary one can say that the purpose of CMS is to preserve and instill within the members of the medical profession those qualities that have endeared the practice of medicine to the hearts of mankind and to which we are indebted for the degree of respect we now enjoy.

Every member of the medical school is a potential member of CMS. Associate membership is also extended to the allied professions of nursing, dentistry, and the medical technologies. Graduate membership is extended to interns and residents and practicing physicians are admitted as honorary members.

The activities of CMS include monthly programs, at which time practicing physicians speak to us, weekly devotional meetings, an annual pre-school retreat, an annual picnic, and an annual banquet. We are in the final stages of a program for the support of medical missions. This year we are having our first Annual Christian Medical Society Lectureship, to be held in the Rankin Memorial Amphitheater at the Louisville General Hospital. We feel that our program is not only an asset to the University and the Medical School, but in a measure also contributes to the development and needs of the individual.

Rollie E. Rhodes, Jr.
President of CMS

We of the Student AMA, many of whom expect to practice in rural and suburban areas, share the pride of the Kentucky Council on Rural Health, the KSMA and its Rural Health Committee, that Kentucky has been chosen as the site of the National Conference on Rural Health, March 7-9, in Louisville. It will be our pleasure to help greet the visitors in person and to cooperate with program activities.

We feel that the Conference affords the Blue Grass State much more, however, than the opportunity to acquaint visitors with its customs and traditions. It brings within the close range of every citizen of the Commonwealth nationally known rural health advisors who have working knowledge of the solution of various health problems of agricultural and suburban areas. It offers the opportunity for the ex-

change of ideas and plans to improve rural health conditions, many of which we as future physicians will help to establish.

Robert G. Overstreet President
U of L Chapter, Student AMA

Dr. Gaines Enters Private Practice of Psychiatry

Frank M. Gaines, M.D., Louisville, former commissioner of mental health in Kentucky, has gone into the private practice of psychiatry in the Fin-castle Building in Louisville. He is associated with John P. Bell, M.D., Harvey St. Clair, M.D., and Hollis Johnson, M.D.

After five years of service as the State's first mental health commissioner, Doctor Gaines resigned his post as of January 15 and was succeeded by Harold L. Mc-Pheeters, M.D., assistant commissioner. Under Doctor Gaines' direction, Kentucky advanced in the discharge of mental patients from state institutions until it now ranks second in the nation in such recoveries.

Doctor Gaines is a native of Carrollton. He was graduated from the University of Louisville School of Medicine in the Class of 1941 and was engaged in private practice in psychiatry prior to his service with the state. He was named Kentucky's top personality of 1955 by Station WHAS, Louisville.

Health Insurance Benefit Payments are Gaining

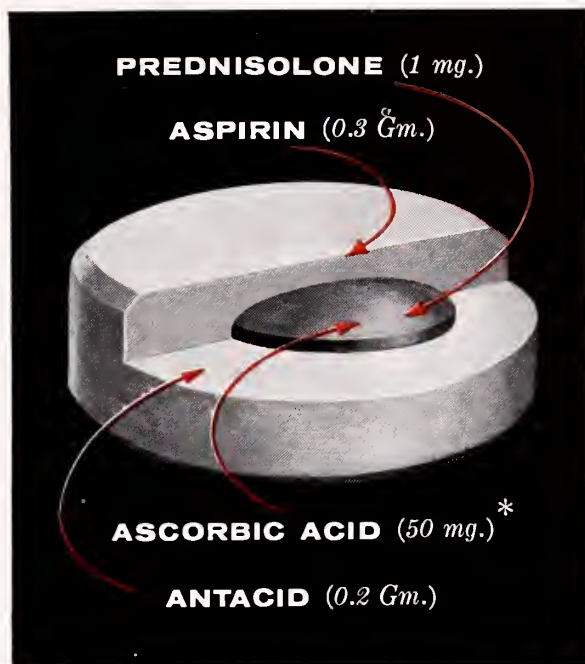
Americans covered by health insurance policies of insurance companies received a total of \$1.5 billion in benefits for the first nine months of 1956, the Health Insurance Institute reports. This represents an 18 per cent increase over the comparable period for 1955, according to the report.

Persons covered by group health insurance policies received a total of \$1.1 billion in benefits, from January through September 1956, or a gain of 19.6 per cent, while those protected under individual policies were paid over \$450 million, or 12.5 per cent over 1955.

Both systems are designed to help the insured pay hospital and doctor bills incurred through illness, or to help replace income lost through sickness. Payments for specific services were: hospital, \$21,578,000; surgical, \$12,575,000; medical, \$5,231,000; nursing, \$2,841,000; drugs, \$824,000; other (ambulance, transportation, etc.), \$824,000.

Co. Society Action Surveyed

The fifth biennial survey will be made of activity of all county medical societies by the AMA Council on Medical Service and the Department of Public Relations in cooperation with other AMA departments. Questionnaires will show scope of service in public education, community work, society projects, meetings, personnel, and finances. More than 1,200 societies supplied information for the 1955 survey.



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Dr. Spurling's Latest Book is Companion to Earlier Work

A new book, "Lesions of the Cervical Intervertebral Disc," by R. Glen Spurling, M.D., Louisville, has just been released by the publisher.



Dr. Spurling's

This volume is a companion monograph to Doctor Spurling's book, "Lumbar Disc," which has been published in three languages in houses in England, West Germany and Tokyo, in addition to the American edition.

A 134 page medical treatise, this latest book is Doctor Spurling's sixth since 1935. He is a graduate of Harvard Medical School in the Class of 1923, and started practicing in Louisville in 1926.

McDowell House Receives Substantial Gifts

Announcements of two substantial contributions, which are to be used for the purchase of land and the restoration of the McDowell House in Danville, were made by W. B. Troutman, M.D., Secretary of the KSMA, at the December 13 meeting of the KSMA Council.

It was stated that the Kentucky Pharmaceutical Association had purchased property adjacent to the McDowell House valued at \$10,000. This will enable the carrying out of a long planned improvement program.

In addition, Doctor Troutman said that E. M. Josey, Frankfort, Secretary of the Pharmaceutical Association, had told him that the Lily Foundation had contributed \$20,000 for the restoration of the McDowell apothecary.

In a special action the Council passed a resolution thanking these two groups for their interest in and support of the McDowell House.

Heads Anesthesiologists

Alfred T. Wagner, M.D., Anchorage, was recently installed as president of the Kentucky Society of Anesthesiologists at the Society's meeting in Louisville. James R. Flautt, M.D., Louisville, was named president-elect.

Max Brand, M.D., Lexington, was elected vice-president and Robert P. Bergner, M.D., Louisville, national-convention delegate. Robert W. Lykins, M.D., Louisville, was re-elected secretary-treasurer and named alternate national delegate.

ACOG to Meet March 2

A Regional Meeting of The American College of Obstetricians and Gynecologists of District V will be held at the Netherland Plaza Hotel, Cincinnati, Ohio, on Saturday, March 2, 1957, according to A. G. King, M.D., Cincinnati, ACOG chairman.

Patient Pays Poetically

The following is a copy of a note attached to a check received by one KSMA member in payment of a bill for his services:

*"This is a bill I don't mind to pay,
For if it wasn't for my doctor
I might not be here today.
I am feeling fine and on the mend.
I don't only love you as a doctor
But also as a friend.
Your dear nurses and helpers
Always meet me with a smile,
So my visits to your office
Are always worth while."*

Special Programs Can Get Help

The Journal has been asked to call to the attention of members of the KSMA that if any of the component county medical societies of the Association have problems in the field of the Cancer or Blood Bank programs, they may look to special committees of the Association for assistance.

Reference Committee No. 5, of which Roy Moore, M.D., Louisville, served as chairman, made this recommendation and it was accepted by the House of Delegates at its 1956 meeting. Help from the committees is available upon request.

Gov. Announces Reappointments

Governor A. B. Chandler has announced the reappointment of R. W. Robertson, M.D., Paducah, and Thomas P. Leonard, M.D., Frankfort, as members of the State Board of Health. Ralph Angelucci, M.D., Lexington, has also been reappointed by the Governor to serve another four-year term as a trustee of the University of Kentucky.

Dr. Snyder Is Rotary Governor

William S. Snyder, Jr., M.D., Frankfort, is serving as Governor of the 233rd District of Rotary International, for the 1956-57 fiscal year, according to Rotary headquarters at Evanston, Ill. Dr. Snyder coordinates the activities of 51 Rotary Clubs in Kentucky, as Governor.

A graduate of William and Mary College in Williamsburg, Va., and the University of Pennsylvania in Philadelphia, Dr. Snyder received his M.D. degree from the University of Chicago. He is president of the Franklin County Medical Society and Past President of the Eye, Ear, Nose and Throat Section of the KSMA.

Films Cite Traffic Safety

The President's Committee for Traffic Safety has announced release of eight new films on the Action Program to reduce traffic accidents. The purpose is to show how everyone can effectively support an accident-reduction drive. For further information, write: The President's Committee for Traffic Safety, General Services Building, Washington 25, D.C.

Social Security Adm. Studies ISMA Disability Proposal

The Social Security Administration is studying a recommendation of the Indiana State Medical Association pertaining to O.A.S.I. payments to the disabled at age 50, according to the AMA Washington Office.

The proposal would establish district or county committees of physicians to review individual doctors' medical findings. The committee would then examine the applicant if necessary, file a report of impairment determination and recommend whether the report might be reversible by medical or other measures.

Its plan would provide, the ISMA declared, (1) an unbiased review of the case, (2) the removal of family and possible political pressure from the physician, and (3) a more factual report than the state agency would otherwise obtain, "which should be of great assistance in making the final determinations as to disability payments.

The AMA office advised that a similar recommendation (Res. No. 25) is under study by the AMA Board of Trustees. Congress changed the Social Security law in 1956 when it passed the bill known as HR 7225.

Handicapped May Be Insured

Health insurance for the handicapped was proposed at the recent Individual Forum of the Health Insurance Association of America in Dallas, Texas. This protection would be made available on an extra premium basis to persons who present a greater risk because of some medical or physical condition.

A standard nomenclature list of physical impairments was designed so that insurance companies might study the groups on which they would be willing to insure, according to Gerald S. Parker, Secretary for Accident and Health and chairman of the Subcommittee on Substandard Risks of the HIAA Individual Insurance Committee. Included in the 48 page list are ten systemic groups: the Brain, Nervous System, Cardio-vascular System, Ear and Eye, Gastro-Intestinal System, Genito-Urinary System, Glands of Internal Secretion and Metabolism, Miscellaneous, Respiratory System and Skeletal-Muscular.

To aid cooperation between the discharged mental patient and his family physician, a patient booklet, entitled "A New Chapter," has been prepared by Smith, Kline and French Laboratories for the patient going home from the mental hospital. The booklet is being mailed to all practitioners. Along with it is mailed information by Leo E. Hollister on the benefits of tranquilizing drugs in the development of a closer working relationship between psychiatrists and other physicians.

Medicare Is On Area Basis

Professional services rendered by a physician in a certain area, under the Dependents' Medical Care Program, are expected to be compensated under the contract and Schedule of Allowances incorporated for that area, according to advice received from the Office for Dependents' Medical Care of the Department of the Army.

This will apply to services performed by a physician not only in his own state or district of residence but in other areas. Under the Medicare program, each contract is applicable to the geographical area for which negotiators of the area concerned were empowered to contract. Compensation therefore would be subject to accepted fee schedule for service performed in that area.

March Symposiums Planned

A series of three regional medicolegal symposiums, sponsored by the American Medical Association, will be held March 15-16 at Atlanta, March 22-23 at Denver, and March 29-30 at Philadelphia. Subjects will include medical testimony, the medical witness and a mock trial.

Audiences of between 300 and 350 physicians and attorneys are being planned. Registration fee is \$5. Since attendance is limited, the AMA advises advance registration as soon as possible with the AMA Law Dept., 535 North Dearborn St., Chicago 10, Ill.

Hendricks Gets AMA Post

Thomas A. Hendricks, secretary of the AMA Council on Medical Service, has been appointed to fill the newly-created position of field secretary to the AMA Board of Trustees.

Mr. Hendricks will serve in a two-way communications job in his new position. He will be field representative from the secretary's office in Chicago headquarters and will interpret AMA policies and programs for state and county medical societies. He joined AMA in 1945 after several years as executive secretary of the Indiana State Medical Association.

Doctor-Lawyer Pact Signed

Representatives of the Jefferson County Medical Society and the Louisville Bar Association signed a "gentlemen's agreement" recently in Louisville on medico-legal relations. Irvin Abell, Jr., M.D., retiring president of the Society and John Harter, M.D., incoming president officiated in behalf of the Jefferson County physicians.

The written pact codifies standing customs on calling of doctors as witnesses, courtroom conduct of doctors and lawyers, medical reports for legal use, consent of patients to release of medical information and other related matters. The code, not considered enforceable, is being distributed to Jefferson County doctors for guidance. It was prepared by a joint committee of doctors and lawyers.

Highlights Of The December 13 Meeting Of The KSMA Council

At the meeting of the 1956 House of Delegates, the Headquarters office was authorized to publish "the highlights of the Council meetings" in the next issue of The Journal of the KSMA as it was considered possible to do so. The highlights of the meeting of December 13, 1956 of the Council are given below. This was the first regular meeting of the Council since the new policy was established.

Digest of Proceedings

The Council of the Kentucky State Medical Association held its first regular meeting of the 1956-1957 Associational year, Thursday, December 13 at the Brown Hotel in Louisville. The meeting started at 10:00 A.M.

As the first order of business following the reading of the minutes, the President reported that he had participated in a meeting of the Commission on Patient Care, had attended several conferences relating to the Medicare program, that the 1957 County Medical Societies Officers Conference program to be held in Lexington on April 4 had been completed and that an excellent program had been set up.

The President also stated that the Committee on Scientific Assembly and Arrangements for the 1957 Annual Meeting had the program well along the way; that an outstanding luncheon speaker had been chosen. He urged all members of the Council to promote physician attendance to the National Conference on Rural Health to be held in Louisville, March 7, 8 and 9. He reported that the Sears and Roebuck Foundation had made its first loan for the improvement of a new physician's office to Robert E. Cornett, M.D., Jackson, Ky., a beneficiary of the Rural Kentucky Medical Scholarship Fund.

Headquarters Office Report

The Secretary, in giving the report of the Headquarters office, stated that much of the time of the staff had been absorbed in activities growing out of the establishment of the Medicare program, the House of Delegates meeting of November 25, and in implementing its directives. He also stated that the Field Secretary and other staff members were devoting much time to the promotion of attendance at the Twelfth National Conference on Rural Health.

The Secretary said the directives of the November 8 meeting of the Executive Committee had been implemented by the Headquarters office. It was also reported that the KSMA Committee on Rural Health through the Kentucky Council on Rural Health was sponsoring a morning long program on health before 2000 women attending the Annual Kentucky Farm and Home Week in Lexington on January 30. His report was closed with a statement that as of December 1, 1956 there were 1995 paid regular KSMA members and 1705 AMA members. This compared with 1955 for the same period, which had 1929 and 1638, respectively.

The Council then heard a report of KSMA Delegates to the AMA. Robert C. Long, M.D., Louisville,

alternate for Clark Bailey, M.D., Harlan, who could not attend, spoke first. Kentucky's Junior Delegate, Vinson Pierce, M.D., Covington, completed the report. High points of the statement of the delegates included a discussion of the efforts of the AMA House of Delegates to re-write the Code of Ethics, the care of non-service connected disabilities of veterans, the Jenkins-Keogh bill and Isotopes.

Referrals from the November 8 meeting of the Executive Committee were then considered by the Council.

The Council approved the recommendation of the Executive Committee that the proposed policy on operation of Professional Relations Committees, both at the State and County levels, be approved and disseminated.

Legislative Committee

The Council accepted the recommendation of the Executive Committee's nominees for the 1956-1957 KSMA Legislative Committee and added additional names, making the present personnel of the committee as follows: Thomas P. Leonard, M.D., Frankfort, chairman, Norman Adair, M.D., Covington, Rufus C. Alley, M.D., Lexington, Clark Bailey, M.D., Harlan, William H. Cartmell, M.D., Maysville, Delmas M. Clardy, M.D., Hopkinsville, J. Gant Gaither, M.D., Hopkinsville, J. Duffy Hancock, M.D., Louisville, O. Leon Higdon, M.D., Paducah, C. C. Howard, M.D., Glasgow, Billy K. Keller, M.D., Louisville, Richard J. Rust, M.D., Newport, Clyde C. Sparks, M.D., Ashland, Charles B. Stacy, M.D., Pineville, Alec Spencer, M.D., West Liberty.

The Council was told that the Kentucky law provides that the Association will name three nominees for each vacancy on the State Board of Health. Since the terms of two members of the State Board of Health expire on December 31, 1956, the Council accepted the recommendation of the Executive Committee that the following three members be nominated to fill the term held by Thomas Leonard, M.D., Thomas P. Leonard, M.D., Frankfort, H. Burl Mack, M.D., Pewee Valley, Robert L. Rice, M.D., Richmond. The following men were nominated for the vacancy of Robert W. Robertson, M.D.: Robert W. Robertson, M.D., Delmas M. Clardy, M.D., Hopkinsville, William L. Woolfork, M.D., Owensboro.

The recommendation of the Executive Committee that the Council appoint a committee to study the possible relocation of the Headquarters office was considered. The Council accepted this recommendation and directed the committee to study several different suggested locations. The Committee was appointed and will report at the next meeting of the Council on April 4.

Dean Willard's Request

William R. Willard, M.D., Lexington, dean of the University of Kentucky School of Medicine, then appeared before the Council. "While much work had already been done," he said, "most of the policy decisions which would interest Kentucky physicians

(Continued on Page 182)

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for the subjective distress

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(Minutes Council Cont.)

are yet to be made." He said he wanted the Kentucky physicians to have a clear understanding of all issues and developments and to make the medical school at the U of K one of the best for medical education and research.

Dr. Willard then stated that it was the desire of the University to appoint a medical advisory committee to work with the University medical school and its staff in formulating plans and policy for the new school. Following discussion, the Council voted that each of the fifteen councilors would submit three names, of which the President and Chairman of the Council would select two. The thirty names would then be forwarded to the University from which the Committee would be selected. The Dean said that in a few cases it might be necessary to go outside of these recommendations of the Council for committee members versed in public health, research and institutional work.

Medicare Review Committee

Acting on the mandate of the House of Delegates, the Council authorized the appointment of a Review Committee to function with the fiscal agent in implementing the Medicare program in Kentucky. Following discussion, the Council authorized the President and the Chairman of the Council to pick a Review Committee. The terms of the Committee were to be staggered so that each member would eventually serve three years. Sam A. Overstreet, M.D., Louisville, was selected as Chairman for the three-year term; J. A. Bishop, M.D., Jeffersontown, for the two-year term; and Roy H. Moore, Jr., M.D., Louisville, for the one-year term.

The Secretary presented a fee for medico-legal counsel and services in the amount of \$931.95 with the Medico-Legal Administrator's recommendation that it be paid under Chapter XII, Section 10, of the KSMA Bylaws. Following a lengthy discussion, the motion that the Council approve the bill for payment failed to carry because it was held that two clauses in Chapter XII, Section 10, of the Bylaws were not complied with.

The Council directed the Committee on Constitution and Bylaws to study Chapter XII, Section 10, in order that the provisions of the section might be clarified.

The Council heard a report of the new Editor of The Journal of the KSMA, Guy Aud, M.D., on the progress The Journal was making and accepted a recommendation that The Journal sponsor a booth at the Annual Meeting of the KSMA, September 17, 18 and 19.

Moving County Membership

The problem of whether a member of a County Medical Society in one end of the state could move his practice to a county in the other end of the state and still retain his membership in the first county was discussed. Legal Counsel for the Association sitting in on the meeting ruled that this did not come within

the purview of Section 9, Chapter XII, of the Bylaws, and this ruling was supported by the Council.

A recommendation that a special effort be made to provide tables for the use of each member of the KSMA House of Delegates during the Annual Meeting was discussed and tabled.

The President-elect read a recommendation from the KSMA representatives on the TB Coordinating Council relative to the request that \$30,000 be set aside from the Governor's emergency fund to pay for drugs for indigent patients discharged from TB hospitals. The Council went on record as approving this recommendation.

As a final action, the Council set the date of Thursday, April 4, to hold its next meeting at the Phoenix Hotel in Lexington.

Hugh Mahaffey, M.D.

Chairman, The Council of the KSMA

Allergy Congress Date Set

The Thirteenth Congress and Graduate Instructional Course in Allergy, sponsored by the American College of Allergists, Inc., will be held March 17-22, 1957 at the Palmer House, Chicago. The course meets AAGP Standards of postgraduate study for Category II credit. Fee for the course is \$50. Write: The American College of Allergists, John D. Gillespie, Treasurer, 2049 Broadway, Boulder, Colorado.

(In the Books Cont.)

and interesting as is his distaste for prophylactic simple mastectomy in these situations.

The sections on detection of breast disease and technic of excision of benign breast tumors are well done and should be of great interest to the general practitioner, as well as to the surgeon.

To those fascinated by the science of biostatistics, the tremendous four-page outline for recording historical, physical, laboratory and operative data in each case, for later transfer to IBM cards, will be impressive.

Surgeons interested in breast cancer will be pleased with the chapter on surgical treatment which details the author's meticulous technic for ultra-radical mastectomy. One could possibly find fault with the illustrations of surgical technic in this chapter. While clear enough for the expert, they are not sufficiently precise for the uninitiated.

The author's critique of lesser procedures than radical mastectomy is logical and penetrating. His evaluation of super-radical procedures is likewise objective and sound. The descriptions of "triple biopsy" and trephine vertebral biopsy, in the evaluation of breast cancer cases will be of great interest to surgeons and general practitioners alike.

As a counterfoil to the chapters on surgical, roentgenological and hormonal treatment of breast cancer, the section on the natural history of breast cancer is a leveling and sobering influence. It is by far the most extensive and thorough treatment of this facet of the disease to be found in any textbook on the subject.

George B. Sanders, M.D.

Overcoming Today's No. 1 Nutritional Problem



Knox "Food Exchange" Diet Enlists the Cooperation of Your DIABETIC Patients for Dietotherapy



1. This Knox booklet is based on nutritionally-tested Food Exchanges¹ and demonstrates that variety is possible for diabetic diets.

2. The easy-to-understand Food Exchanges simplify dietary control for the diabetic by eliminating calorie counting.

3. Diets promote accurate adjustment of caloric levels to the special needs of the patient, yet allow each individual considerable latitude in the choice of foods.

4. Each booklet presents in addition 16 pages of appetizing, kitchen-tested recipes.

1. The Food Exchange Lists referred to are based on material in "Meal Planning with Exchange Lists" prepared by Committees of the American Diabetes Association, Inc., and The American Dietetic Association in cooperation with the Chronic Disease Program, Public Health Service, Department of Health, Education and Welfare.

Chas. B. Knox Gelatine Co., Inc.
Professional Service Dept. SJ-22
Johnstown, N. Y.

Please send me dozen copies
of the Knox diabetic brochure describ-
ing the use of Food Exchange Lists.

Your Name and Address



(Continued from Page 120)

and six more placed under construction.

7. Twenty-four additional hospitals have requested Federal Assistance in construction programs:

- 2 General hospitals for Schools of Nursing
- 1 Mental hospital for addition of beds for tuberculosis patients
- 13 General hospitals—5 new and 8 additions
- 3 General hospitals for diagnostic and treatment centers
- 5 General hospitals for nursing (convalescent) homes

The Doctor and His Medical Organization

(Continued from Page 163)

and national bodies could not exist; and it is for and through our county societies that most of the policies of the A.M.A. and the K.S.M.A. are determined and implemented. The decisions reached by the House of Delegates of these

bodies should, and in most cases do represent, as far as it can be determined, the opinions of the majority of our physicians, as expressed through the actions of the local societies. Each county society should consider in its meetings the important problems relating to medical practice today, and through its delegates attempt to convey its wishes to the parent bodies.

It is also the duty and privilege of each county society to pass judgment on the professional, ethical and moral qualifications of each applicant for membership in the State Association and the American Medical Association. By the same token, each County Society should be the body to discipline those physicians whose conduct is bringing disrepute on their profession.

The doctor who belongs to his County Medical Society and participates actively in its affairs not only helps to improve the quality of medical care in his community by so doing; but he also adds greatly to his own enjoyment of his medical practice.

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everyday practice*

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 - well tolerated, nonaddictive, essentially nontoxic
- no blood dyscrasias, liver toxicity, Parkinson-like syndrome or nasal stuffiness
 - chemically unrelated to chlorpromazine or reserpine
 - does not produce significant depression
- orally effective within 30 minutes for a period of 6 hours

Indications: anxiety and tension states, muscle spasm.

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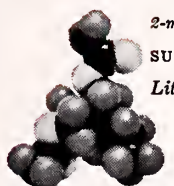
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News Items

Fred C. Reynolds, M.D., has opened a practice in Owensboro after serving as a flight surgeon in the U. S. Air Force and practicing in Clarksville, Tenn. A native of Tennessee, Doctor Reynolds received his M.D. degree from the University of Tennessee School of Medicine in 1947. He interned at St. Vincent's Hospital, Indianapolis, and practiced at Hartford from 1948 to 1953.

James T. McClellan, M.D., Lexington, has been named president-elect of the Kentucky Society of Pathologists. He will succeed Israel Diamond, M.D., Louisville, now president. Doctor McClellan is president of the medical staff of St. Joseph Hospital, Lexington. Harold Gordon, M.D., Louisville, has been re-elected secretary-treasurer. H. Davis Chipps, M.D., Lexington, was chosen to succeed Doctor Gordon next year.

John F. Knox, M.D., Mt. Sterling physician for over 35 years, has moved his office to Stanton and will practice in Powell County. Doctor Knox, a native of Powell County, and a graduate of the old Kentucky School of Medicine in Louisville in 1908, practiced at Stanton and Bown before going to Mt. Sterling in 1920.

Claude E. Cummins, Jr., M.D., has joined the staff of Maysville's medical clinic and will be associated in the practice of medicine with Mitchell B. Denham, M.D., Harry C. Denham, M.D., and George Estill, M.D. Doctor Cummins received his medical training at the University of Louisville School of Medicine, where he graduated in 1955. He served an internship at Parkland Memorial Hospital, Dallas, Texas.

Spafford Ackerly, M.D., Louisville, has been reappointed by Governor Chandler as a member of the Advisory Council on Mental Health for a four-year term, ending Dec. 31, 1960.

A. B. Clark, M.D., has moved his office from McKee to Richmond. Doctor Clark is a graduate of the University of Louisville School of Medicine in the year of 1949, and served his internship at Charity Hospital, New Orleans, with post-graduate work in pediatrics at Children's Hospital, Louisville, and at Tulane University. He practiced at McKee five years after naval service in the South Pacific four and one-half years.

John H. Neyer, M.D., Ashland, has announced the opening of his office for the practice of Gynecology and Obstetrics at Ashland. Doctor Neyer is a graduate of Western Reserve University School of Medicine in the Class of 1950. His internship was served at Brook Army Hospital, Ft. Sam Houston, Texas, and his practice includes work at the Crile V. A. Hospital, Cleveland, Ohio.



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FOR ALL TYPES OF NERVOUS AND MENTAL DISEASES, AND ALCOHOLISM

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Four modern buildings, separate for men and women
Individual rooms. All buildings equipped with radio.
Recreation.

Hydrotherapy, Electrotherapy. Up-to-date psychiatric
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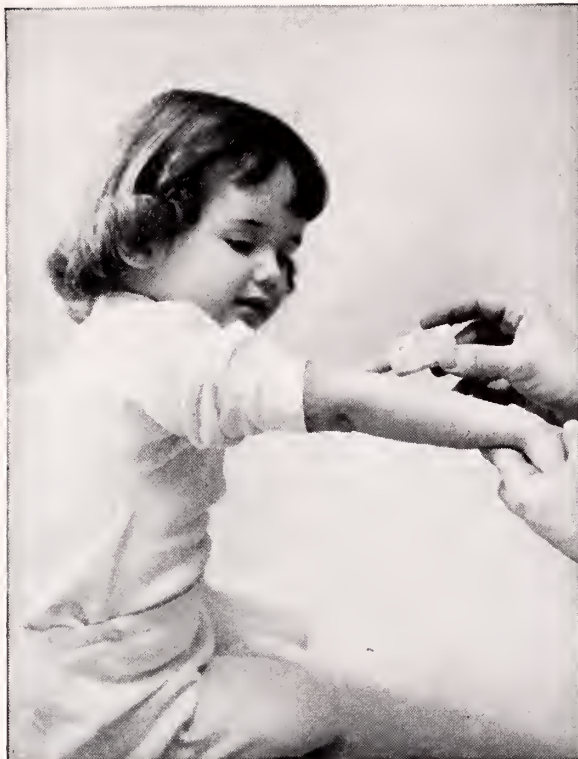
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T. N. KENDE, M.D., Neuropsychiatrist
Medical Director

T. J. SMITH, M.D., Associate



Cool comfort for hot itching dermatoses

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(HYDROCORTISONE-CALAMINE LOTION & CREAM)

There's no waiting for relief when you prescribe HYDROBALM for patients with inflammatory and pruritic dermatoses. In a matter of seconds HYDROBALM suppresses distressing symptoms, hides unsightly lesions, and sets the stage for healing. HYDROBALM—Cream or Lotion—presents in two convenient, delicately scented, water-washable flesh-tone greaseless vehicles, 4 therapeutically proved agents: 'Hydrocortone' (Hydrocortisone, U.S.P.)—0.5%—to suppress inflammation. Calamine—8%—to soothe and protect inflamed skin. Benzocaine—3%—to relieve itching and pain. Hexylated Metacresol—0.05%—for antiseptis.

Supplied: Topical Lotion HYDROBALM—in 15-cc. and 30-cc. handy, purse-size, plastic squeeze bottles. Topical Cream HYDROBALM—in 5-Gm., 15-Gm. and 30-Gm. tubes.



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(News Items Cont.)

Vester A. Jackson, M.D., who has been practicing medicine and surgery in Los Angeles, Calif., after moving there from Clinton, has announced his plans to return to practice in Clinton.

Donald Chatham, M.D., has been selected by the Shelbyville Jaycees as their candidate for one of the three outstanding young men of Kentucky. A graduate of the University of Louisville School of Medicine in the Class of 1952, Doctor Chatham is quite active in community welfare, according to the Jaycee entry. He is being judged along with entries from some 80 other locals over the state this month.

George Purdy, M.D., New Liberty, has been named "Owen Countian of the Year—1956." Born in 1879, Doctor Purdy has practiced many years in Owen County. He is a graduate of the Kentucky University Medical Department in 1904.

Daniel Clark Plunket, M.D., a native of Alabama, has joined the staff of the Fuller-Morgan Hospital, Mayfield, as pediatrician. A graduate of Emory University School of Medicine in the Class of 1952, Doctor Plunket has served as a pediatrician at the U. S. Army Hospital, Heidelberg, Germany, for the past two years.

Louis O. Giesel, M.D., Louisville, has opened an office at Hikes Point for the practice of pediatrics. A 1950 graduate of the University of Louisville School of Medicine, Doctor Giesel served his internship at Louisville General Hospital. He spent two years in post-graduate work at Yale University.

In Memoriam

JOHN PAYNTZ CHAMBERLIN, M.D.

Cynthiana

1869-1957

A retired Harrison County physician, Doctor Chamberlin, 87, died January 10 after a short illness. He was graduated in 1892 from the Kentucky School of Medicine, Louisville, and had practiced general medicine more than 50 years in Harrison County.

PROCTOR SPARKS, M.D.

Ashland

1890-1957

Proctor Sparks, M.D., a retired Ashland physician, died January 16 of a heart attack at his home in St. Petersburg, Fla. He was 67. A former KSMA councilor, Doctor Sparks was graduated from the University of Louisville Medical Department in 1917.

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PERTINENT PARAGRAPHS

The Second Inter-American Medical Convention will convene at the Hotel El Panama, Panama City, Republic of Panama, April 3-5, 1957, under the sponsorship of the Medical Society of the Isthmian Canal Zone, a chapter of the American Medical Association since 1906. Registration fee is \$5. Program speakers will be from North and South America and all papers will be translated into both English and Spanish. For further information write: William T. Bailey, M.D., Chairman of Convention Executive Committee, Box 'O', Ancon, Canal Zone.

The 1958 Federal budget will call for more than \$200,000,000 for medical research by the National Institutes of Health. The increased sum is in keeping with the gradual broadening of the Health, Education, and Welfare Department's program to solve welfare problems and prevent sickness. Last year Secretary Folsom of HEW asked \$126,525,000 for medical research, a 28 per cent increase over the year before. Congress appropriated \$180,000,000. This year's request for 200 million is a record. The Food and Drug Administration, the Office of Vocational Rehabilitation, and the Indian Service are among the agencies for which additional sums will be asked.

Cardiac Surgical Program—National Jewish Hospital at Denver, a free, non-sectarian institution, is expanding its facilities for cardiovascular patients with lesions amenable to surgical intervention. Only patients unable to pay for private care are eligible for admission. Since the hospital has a complete cardiopulmonary physiology laboratory, definitive diagnosis by the referring physician is not necessary. Inquiries concerning admission should be directed to Miss Grace Grossman, Director of Social Service and Rehabilitation, National Jewish Hospital, 3800 East Colfax Avenue, Denver 6, Colo.

The University of Texas Postgraduate School of Medicine will present a course in Rheumatic Diseases: Present-Day Concepts and Their Management, at Houston, Texas, February 27-March 1. Tuition for the course is \$40, and application for admission should be mailed to The University of Texas Postgraduate School of Medicine, Texas Medical Center, Houston 25, Texas, before February 18, 1957.

A Postgraduate Course in Ophthalmology will be held at Ohio State University March 4-5, 1957. Program topics include eye surgery, diagnosis and treatment of glaucoma, evaluation of headache, clinical use of steroids, etc. Registration fee is \$20. Address all inquiries to: William H. Havener, M.D., Department of Ophthalmology, University Hospital, Columbus, Ohio.

County Society Reports

Fayette

The Fayette County Medical Society held a regular meeting November 13 at the Good Samaritan Hospital.

A reading of minutes of the Executive Committee meeting of November 6, included the following excerpts:

In a discussion of advertising, "it was pointed out that any time a doctor's name appears in print it is of benefit to him. What constitutes ethical advertising is poorly defined in the Principles of Medical Ethics of the AMA. It does state 'disregard of local customs and offenses against recognized ideals are unethical.'" It was recommended that the Society appoint a committee of five to define the relation of publicity to the ethical practice of medicine and report its conclusions to the Society.

The Blue Cross re-opening period for the Medical Society was discussed. It was recommended that in view of interest in opening the group for Blue Shield coverage that it be presented to the Society.

U. W. Leavell, Jr., M.D., presented a scientific paper on "Dermabrasion for Cosmetic Skin Lesions," and demonstrated equipment necessary for this treatment.

Resolutions were read on the death of J. L. Vallingham, M.D., and Jack G. Webb, M.D.

Report was made of a discussion with William K. Willard, M.D., dean of the University of Kentucky Medical School, concerning an advisory committee of Fayette County physicians for the School. The dean had explained that a state-wide advisory board would be appointed but felt that a Fayette County advisory committee would be of great help in developing the school program and other matters of local importance. Approval of the formation of the committee was given.

The reports of two nominating committees were given for the selection of new society officers.

A committee of five was appointed "to define the relation of publicity to the ethical practice of medicine and report its conclusions to the Society." Named to this committee were the following physicians: Drs. M. C. Darnell, D. E. Scott, Robert B. Warfield, Ernest C. Strode, and Carl H. Fortune.

It was moved that the secretary canvass the membership to determine interest in opening a Blue Shield group.

A report was given of the Civil Defense Conference in Chicago attended by T. L. Adams, M.D.

The meeting was adjourned at 9:15 p.m.

T. R. Bryant, Jr., M.D., Secretary


(Continued on Page 192)

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**GRADATIONS OF ANALGESIA
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Phenobarbital	gr. ¼
Acetophenetidin	gr. 2½
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Codeine Phosphate	gr. ¼
Phenobarbital	gr. ¼
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Acetylsalicylic Acid	gr. 3½

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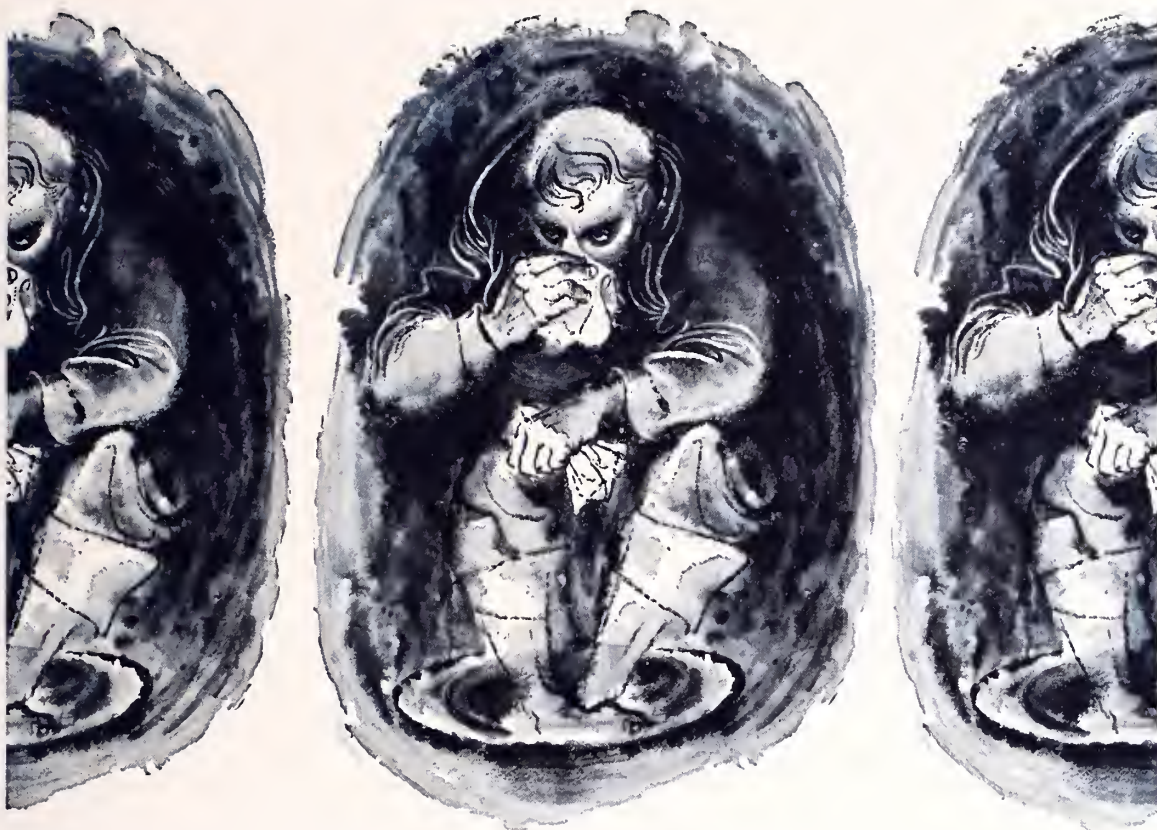


Codeine Phosphate	gr. ½
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ACHROCIDIN is particularly valuable in treating acute respiratory infections during epidemics or when questionable middle ear, pulmonary, nephritic, or rheumatic signs are present.

ACHROCIDIN offers early, potent therapy against such disabling complications as otitis media, sinusitis, bronchitis to which the patient may be highly vulnerable at this time.

Included in the comprehensive ACHROCIDIN formulation are the analgesic components recommended for prompt relief of common cold symptoms.

Adult dosage for ACHROCIDIN Tablets and new, caffeine-free ACHROCIDIN Syrup is two tablets or teaspoonfuls of syrup three or four times daily. Dosage for children according to weight and age.

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Each tablet contains:

ACHROMYCIN®		Caffeine	30 mg.
Tetracycline	125 mg.	Salicylamide	150 mg.
Phenacetin	120 mg.	Chlorothen Citrate	25 mg.



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Fayette

A regular meeting of the Fayette County Medical Society was held December 11 at the Good Samaritan Hospital.

Minutes were read of the Executive Committee meeting on December 4. Action taken included the following.

"The request by William K. Willard, M.D., (dean of the University of Kentucky Medical School) which was presented at the last meeting, regarding a list of names of members of the Fayette County Medical Society from which the University can pick an Advisory Committee was discussed." Action was taken as follows:

"The Fayette County Medical Society demurs at providing a list of nominees from which President Dickey would appoint a Liaison Committee, since this would not represent the Fayette County Medical Society. The Executive Committee recommends that a list of seven names be elected by the Society to represent them to the University of Kentucky; and that President Dickey and Dean Willard be requested to allow this Committee to act as Advisory and Liaison Committee with the University and with the Medical Center.

"Inasmuch as this committee is needed at once, the Executive Committee recommends that the President be empowered to appoint its members for one year; and that the members thereafter be elected at the regular December meeting annually."

"A letter from the Blue Grass Claims Mens Association objecting to restriction of medical information available to insurance companies and requesting a conference regarding this matter was read and discussed." Approval was given to the invitation of representatives of the BGCM Association to attend a conference of the Medical Records Association on December 19.

It was reported that the Fayette County Bar Association had requested the Medical Society to appoint a committee to act with a committee from the Bar Association to set up a program for the discussion of mutual problems.

The scientific paper of the evening, "Care of Trauma of the Chest," was presented by J. B. Hollo-way, M.D.

New officers elected were: A. B. Barrett, M.D., president; M. C. Darnell, M.D., vice-president; T. R. Bryant, Jr., M.D., secretary-treasurer; Carl Wheeler, M.D., censor. Delegates included the following physicians: Drs. John Scott, T. L. Adams, Carl Fortune and R. C. Blount.

The application of S. W. Lykins, M.D., for membership in the Society was approved.

A report was made of the recent meeting of the KSMA House of Delegates in Louisville on the Medicare program. It was stated that "the Medical Association chose the medical service plan, and that there were only three votes against it, those being the three delegates from Fayette County."

It was further reported that patients would be issued cards showing coverage under the medical service plan and that doctors may accept or reject them as they wish.

The Executive Committee's resolution regarding appointment of a Liaison Committee for the University and the Medical Center was accepted, with the following physicians names: N. L. Bosworth, T. R. Bryant, Jr., M. C. Darnell, R. G. Elliott, Thornton Scott, R. B. Simons, J. S. Sprague.

It was moved that a committee of three be appointed to act with a committee from the Fayette County Bar Association for the discussion of mutual problems.

The meeting was adjourned at 9:30 p.m.

T. R. Bryant, Jr., M.D., Secretary

McCracken

A regular meeting of the McCracken County Medical Society was held November 28.

Following the reading of a letter from the Heart Clinic Committee, it was considered that a Heart Clinic is not practical at this time.

It was approved that the December meeting be held December 19.

A letter to the Society was read relative to an announcement of a sectional meeting of the American College of Surgeons.

C. P. Orr, M.D., Secretary

McCracken

The McCracken County Medical Society held its regular monthly meeting December 19.

The Society voted to invite the First Councilor District to meet with them the fourth Wednesday in April at which time KSMA President Richard R. Slucher, M.D., will be the guest speaker.

It was moved that the Society hold the May 1957 meeting on the second Tuesday of the month.

Eugene Ruff, M.D., expressed his regrets in leaving Paducah and thanked the membership for the cooperation and friendship shown him.

A motion carried raising the annual society dues to \$20, thus making a total of \$85 to include all dues.

The following officers were elected for the new year: C. P. Orr, M.D., president; Theodore Koss, M.D., vice president; Vernon Pettit, M.D., secretary-treasurer; Walter Johnson, M.D., and Walter Turner, M.D., delegates; Ben Bradford, M.D., alternate delegate. Leon Higdon, M.D., delegate, will continue to serve through 1957.

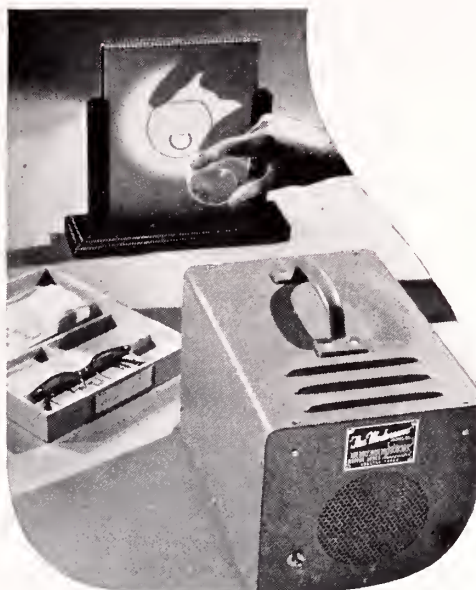
A motion carried that the president appoint a committee to investigate various ways of honoring E. W. Jackson, M.D.

C. P. Orr, M.D., Secretary

Numerous requests from physicians, churchmen, television writers and viewers has prompted March of Medicine to repeat its hour-long documentary on missionary medicine, "Monganga," tribal dialect for "White Doctor," on Tuesday, March 5, at 9:30 p.m. EST over the NBC-TV network. The show chronicles the daily labors of John Ross, M.D., a medical missionary, as an "illustration of the work American doctors are doing for sick people all over the world," according to AMA release.

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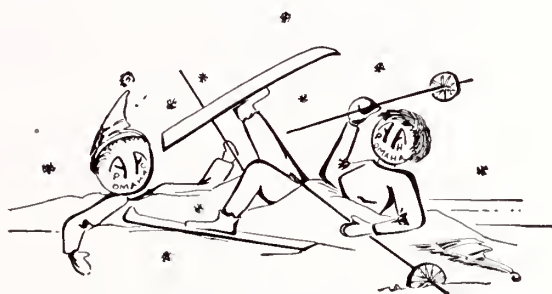
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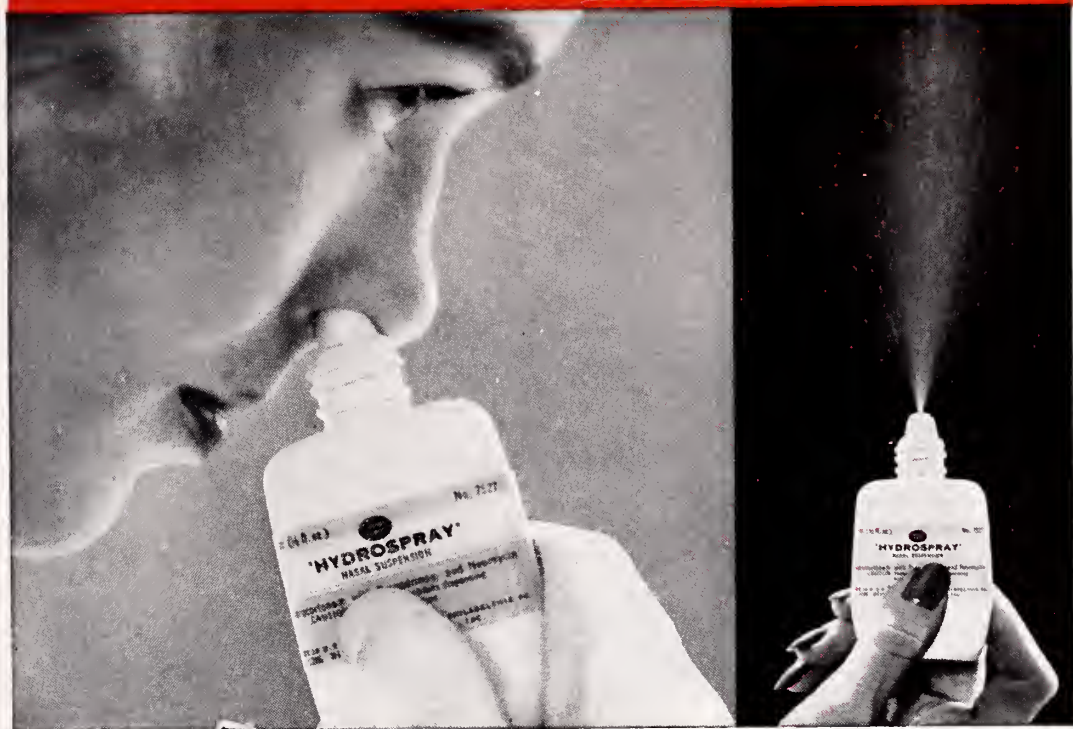
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*Anti-inflammatory—
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MAJOR ADVANTAGES: New synergistic anti-inflammatory, decongestant and antibacterial formula. High steroid content assures effective response.



Topically applied hydrocortisone¹ in therapeutic concentrations has been shown to afford a significant degree of subjective and objective improvement in a high percentage of patients suffering from various types of rhinitis. HYDROSPRAY provides HYDROCORTONE in a concentration of 0.1% plus a safe but potent decongestant, PROPADRINE, and a wide-spectrum antibiotic, Neomycin, with low sensitization potential. This combination provides a three-fold attack on the physiologic and pathologic manifestations of nasal allergies which results in a degree of relief that is often greater and achieved faster than when any one of these agents is employed alone. **INDICATIONS:** Acute and chronic rhinitis, vasomotor rhinitis, perennial rhinitis and polyposis.


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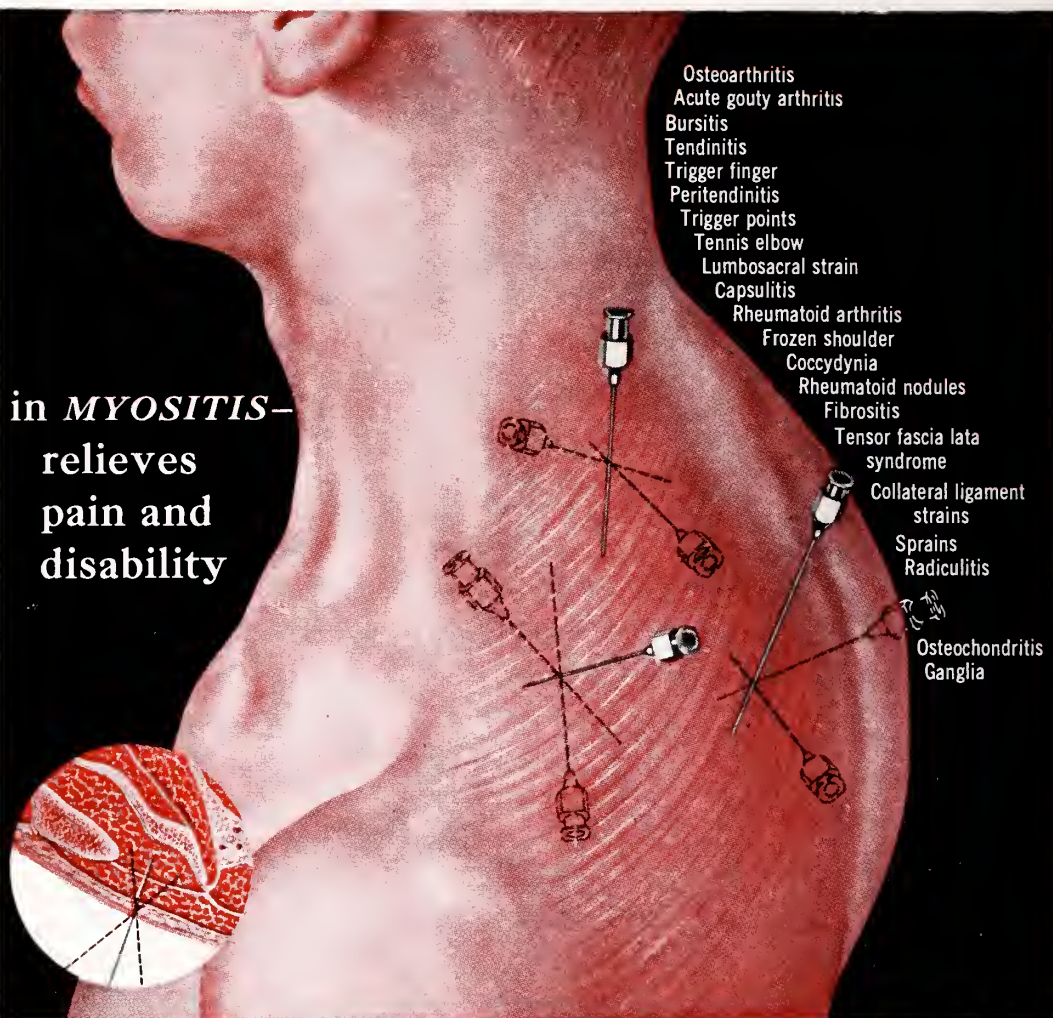
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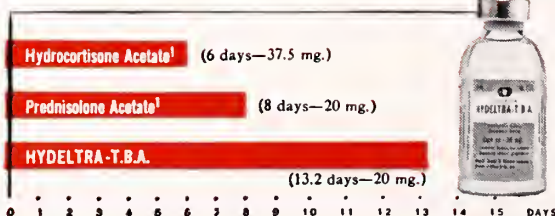
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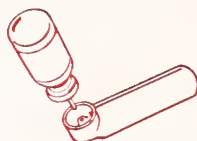


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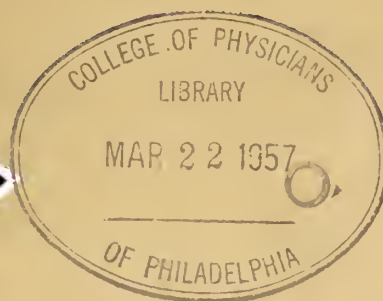
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1. Knoch, H.R., and Kirk, R.: Prochlorperazine—A New Agent for the Treatment of Psychic Stress, in manuscript.

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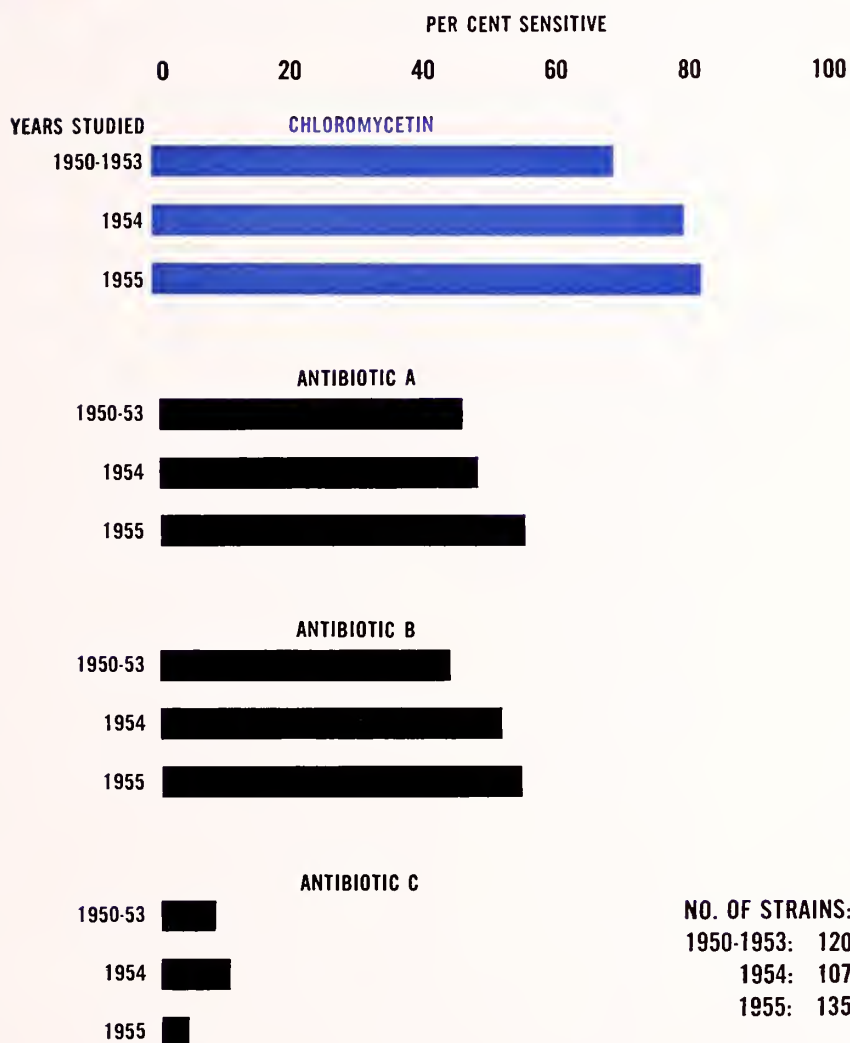
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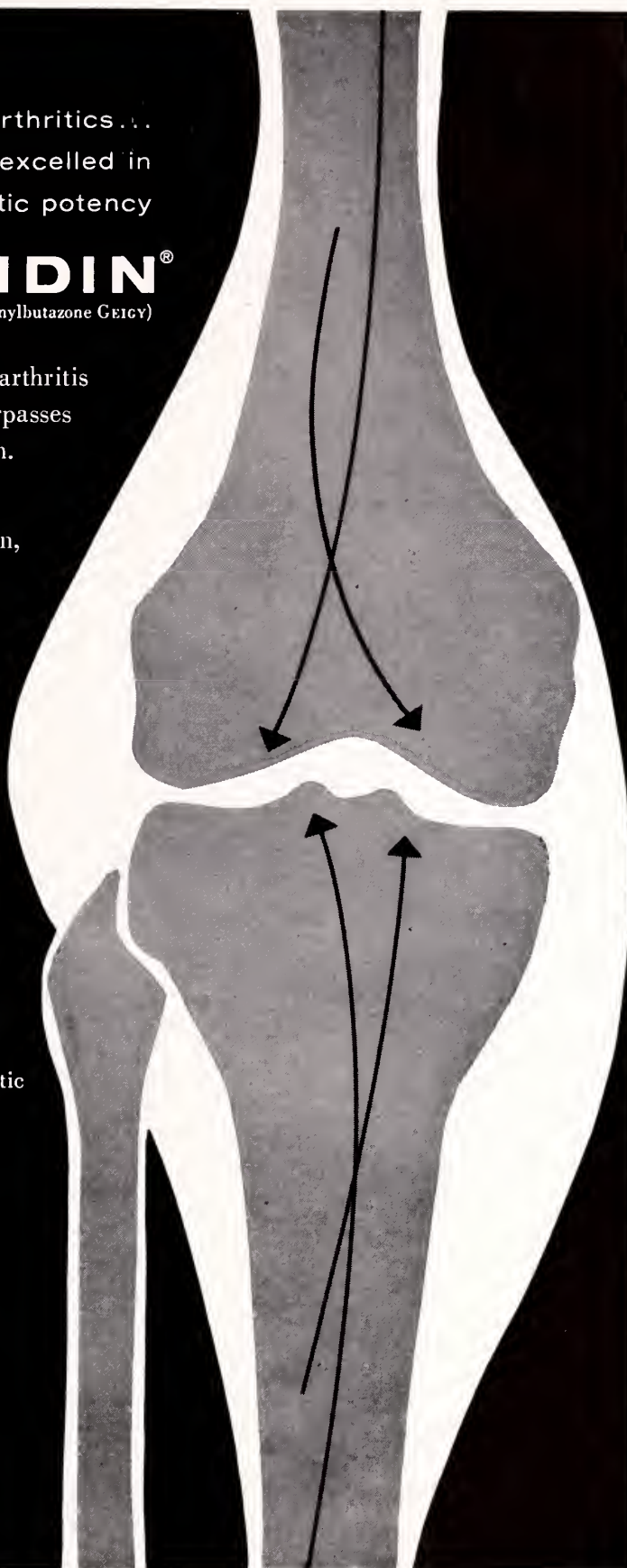
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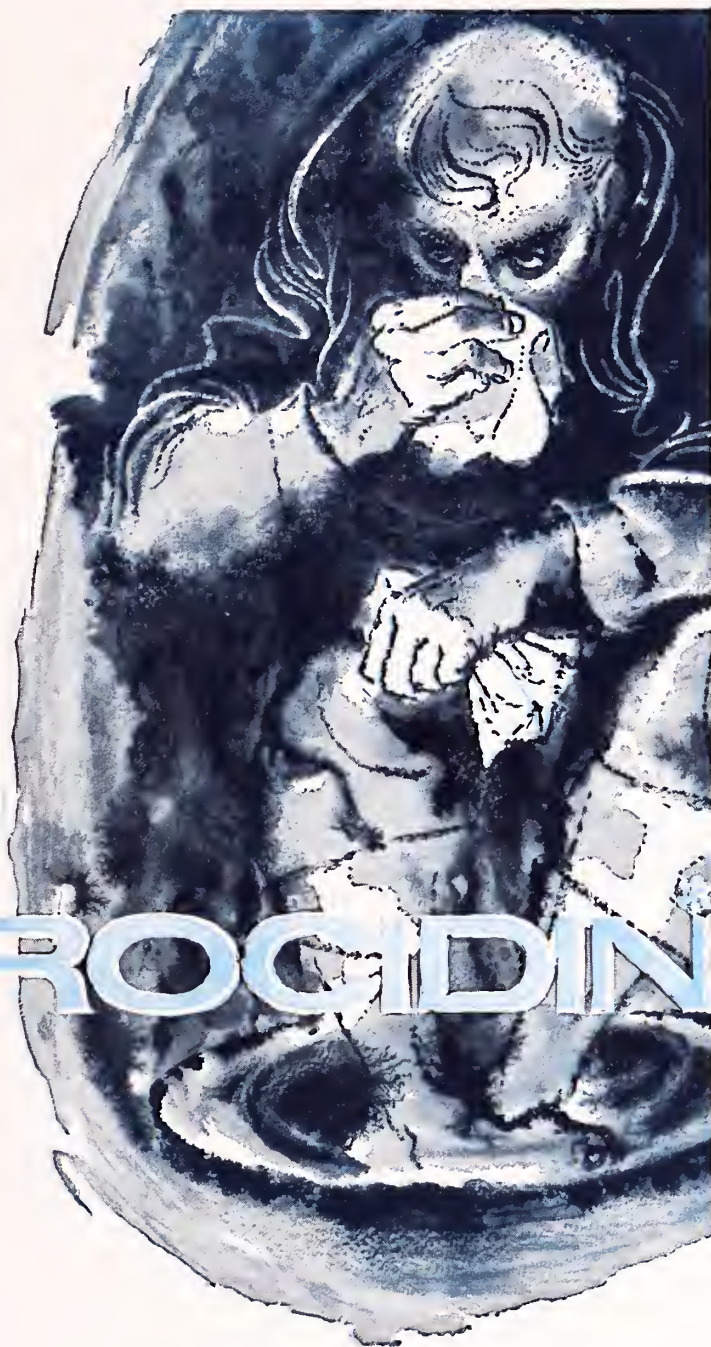
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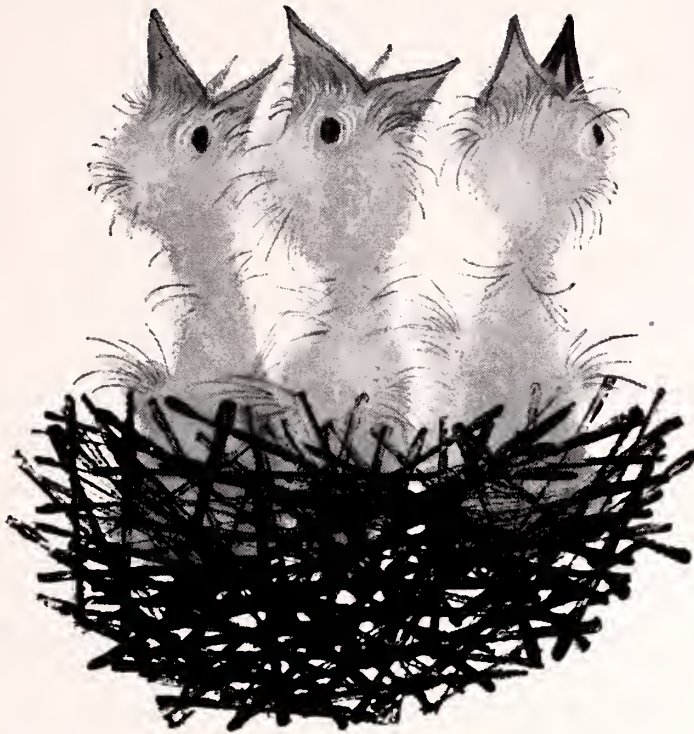
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**message
from
the
President**

Fortunately and properly, the concept that a physician need only be good at treating the sick in order to be a good doctor and a good citizen has long since been abandoned. The thoughtful physician can no longer avoid his responsibility in the area of civic and legislative activity by attempting to hide behind the thread-bare cliché "I'm too busy."

Many physicians are willing to take part in these activities but actually find it difficult because of lack of information or know-how. This is understandable as we have not been trained to participate in areas beyond the field of scientific medicine.

Your Kentucky State Medical Association is seeking to remedy this situation by presenting each year the County Society Officers Conference. This year the Conference will be held at the Phoenix Hotel in Lexington, Thursday, April 4 starting at 9:45 in the Fireside Room. This is a must for all county medical society officers and county society committee members, all KSMA committee members, officers and councilors, all auxiliary board members, and any others interested in the future of medicine.

Among the highly important subjects of acute interest to us all to be covered by six outstanding nationally known speakers are, future of labor-management health plans—medicine's new legislative effort—recruitment of medical students—your relations with your local newspapers—voluntary health insurance and how medicare operates. After hearing these presentations, you will be much better equipped to accept your responsibilities as a good citizen in your community.

Special luncheon attraction will be United States Senator from Kentucky, Thruston B. Morton, who will discuss "What Medicine can expect from the 85th Congress." April 4 will be a very profitable day for us all - - - Will see you in Lexington.

R. R. Slucher

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Locations Wanted

Thirty-one year old, married physician, graduate of University of Louisville School of Medicine would like to do general surgery in a community of 10,000 or more. Eligible for specialty board exams and available in July, 1957. LW 119

Graduate of College of Medical Evangelists would like to do general practice and surgery with a group of physicians. Board eligible, thirty-seven years of age and married. LW 120

Thirty year old, married physician would practice internal medicine as an associate in community of 25,000 or over. Graduate of Temple University School of Medicine and is now finishing his residency. Available July, 1957. LW 121

University of Maryland graduate interested in the practice of pediatrics as an associate. Married, Episcopal and available now. LW 122

Graduate of University of Pennsylvania desires to practice internal medicine in small community as an associate or in a clinic. Thirty years of age, married and member of the USAF Reserve. LW 123

Thirty-four year old graduate of University of Louisville School of Medicine wants to do general surgery in Kentucky. Now finishing residency and available July, 1957. Married and Protestant. LW 124

Available July, 1957, twenty-seven year old general practitioner. Graduate of University of Louisville School of Medicine, married, protestant and member of Phi Chi Medical Fraternity. LW 125

Graduate of University of Tennessee School of Medicine would like to do general surgery and general practice in Kentucky as associate or in a clinic. Available on twenty to sixty days notice. Catholic and married. LW 126

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Western Kentucky town and community of over 3500 desires physician to take over busy general practice of doctor leaving for military service in mid-summer. Office and equipment are available. PW 119

Western Kentucky community with trade area of 15,000 wants a general practitioner. Sixty miles from a city of approximately 50,000. Elementary and secondary schools. Hunting, fishing, golf courses and recreation grounds in close proximity. PW 120

General practitioner needed in community of 1300 population. No physician located here at the moment. Office and housing space available. Secondary schools and numerous churches. PW 121

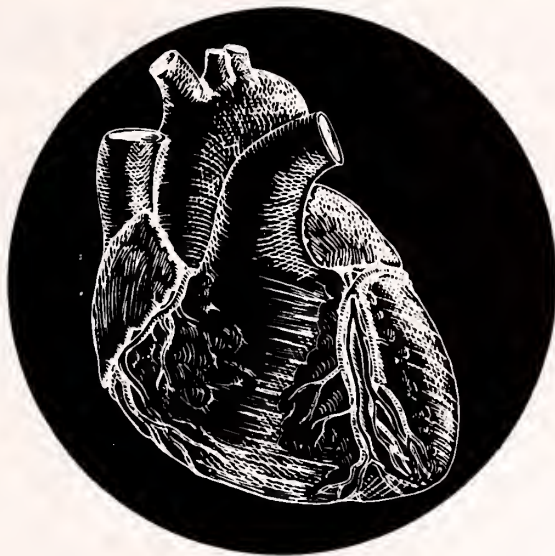
Community in Northern Kentucky is in need of a general practitioner. No physician located here now. Housing, schools and churches available. This is a farming community, together with industrial workers who commute to a city nearby. PW 122

Community in the middle of the Blue Grass Section of Kentucky is in need of a general practitioner. There is no physician in this farming community and housing and office facilities can be arranged. PW 123

General practitioner needed in small community in Western Kentucky. Schools and churches available. Housing and office space can be had. Farming and industrial work are principal sources of income. PW 124

Centrally located community with one physician in attendance would like a general practitioner, with some surgery, to associate. This is an established practice. PW 125

Clinic in Western Kentucky community of approximately 20,000 would like an associate for the practice of pediatrics. Excellent opportunity for young physician. PW 126



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PUBLIC HEALTH PAGE

RUSSELL E. TEAGUE, M.D.

Commissioner of Health

State of Kentucky

REGULAR public health programs throughout Kentucky were interrupted last month by flood conditions in the Southeastern part of the state. Some 110 local health department workers in the 22 counties in the stricken area suddenly found themselves with the responsibility of administering emergency public health measures. This force was soon augmented by 10 physicians, a veterinarian, 36 public health nurses, 26 sanitarians, 6 engineers, 2 food and drug inspectors, and health educators and other personnel from the Kentucky State Department of Health and county health departments, making a total of nearly 200 public health workers in the area during the emergency.

Immediate attention was given to working with local physicians and health departments in establishing immunization clinics and providing other emergency services of a public health nature. Clinics were set up in churches, schools, stores and, in one instance, even on a stretch of railroad tracks. Physicians and nurses in the flooded areas are to be commended for their efforts which may serve to prevent serious epidemics that can so easily occur under such conditions.

Many drug stores in the flooded areas suffered heavy losses and large quantities of medical supplies—typhoid, tetanus and polio vaccines, antibiotics, syringes, needles, gauze sponges, alcohol, and cotton balls—were

shipped in by the State Department of Health and distributed through local health departments. In addition to the above, there was a great need for chemicals to decontaminate water supplies, for quarantine and condemnation tags, and instruction to home owners about decontamination techniques.

Even while some areas were still flooded, public health workers began the immense clean-up program. Engineers from the State Department of Health supervised the repair of damaged equipment in water purification plants and, as the water receded, likewise supervised their decontamination. Instructions and assistance were given to home owners in the purification of the many private water supplies in the area. State and county sanitation officials supervised the cleaning of wholesale groceries, supermarkets, bottling plants, dairies, bakeries and food lockers condemning all contaminated food. Drug inspectors from the State Department of Health surveyed drug store losses and supervised the destruction of contaminated drugs. In many instances guards were posted by local officials to prevent looting of contaminated foods and drugs until they could be destroyed.

In reconstructing communities in the flooded areas, hazardous health conditions should be eliminated and to that end state and county public health personnel will continue to cooperate with physicians and other individuals and agencies to realize this goal.

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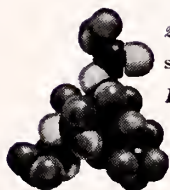
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*Geiger, E.: Digestion, Absorption and Metabolism of Protein, in Wohl, M. G., and Goodhart, R. S.: Modern Nutrition in Health and Disease, Philadelphia, Lea & Febiger, 1955, pp. 98-143.

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1. Locket, S.; Brit. M.J.
1:809 (Apr. 2) 1955.

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2. Wright, W.T., Jr., et al.; J. Kansas
M. Soc. 57:410 (July) 1956.

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WASHINGTON NEWS DIGEST



Washington, D. C.—With Congress now well along in its session, the list of health and medical bills totals several hundred. Some are minor—and few persons will be affected regardless of what happens. Others just don't make much sense—and the committees, regardless of politics, can be trusted to let these measures die a peaceful death.

But there are scores of others—all important bills—that have some chance of passage, their prospects ranging from an outside possibility to a strong probability. At this stage they can be regarded as the raw material out of which will come the studies, the debates and the arguments in the months ahead.

One of the major health-medical issues is federal aid to medical, dental and osteopathy schools. On this the administration wants grants for construction and equipment only; some of the Democrats want to include money for operating expenses as well.

In number of bills introduced, the general subject of problems of the aging probably tops the list. And that is no surprise. For several years welfare workers, housing experts and recreational leaders, as well as physicians, have been looking for ways to help the retirement age population. Recently a special center was set up within the Institutes of Health to devote its time exclusively to the aged. Outside government, voluntary groups have also been at work on the same subject.

Now the ideas developed by the years of discussion are coming to the surface in the form of legislation. Several of the bills would set up commissions, appointed either by the President or Congress. Another recommends that an existing House Committee make a study of the aging, similar to that suggested for the various commissions.

The commissions and committees would have one thing in common: They would further study and investigate in a field that many persons believe already has been plowed and replowed by investigators.

Several lawmakers want to get going right away. They would set up within the Department of Health, Education, and Welfare a new Bureau of Older Persons, which immediately would start out to solve some of the problems through grants, demonstrations and more research.

Most controversial of the "help the aged" bills is one originally proposed by the then Social Security Administrator, Oscar Ewing, in 1951. It would allow 60 days a year of government-paid hospitalization every year for persons covered by OASI after they

reach age 65. They could have this free service whether or not they were on retirement.

As in most Congresses, those who want to get the veterans more benefits and those who think they are getting too much already are coming to grips over new bills. Important in this group is a measure proposed by Chairman Teague (D., Texas) of the House Veterans Affairs Committee that would tighten up procedures under which veterans with non-service-connected conditions receive hospitalization. But at the same time there is pressure from other quarters for a lengthening of the "presumptive periods" for various diseases. Where the law now states that a certain disease or condition will be considered service-connected if diagnosed within one year after the veteran's discharge, these bills would make the period two or three years.

Many other bills aimed at liberalizing veterans' benefits in various ways also are awaiting committee action.

Social security and taxes are other popular fields for the legislators. As expected, several bills call for lowering the age at which a disabled person can start receiving his social security pension, now set at 50. Many measures would change the income tax laws to allow more credit for medical expenses, and one proposes allowing the taxpayer to deduct premiums for health insurance from his income tax itself.

Of major interest to physicians and most self-employed is the Jenkins-Keogh legislation, which would allow deferment of taxes on a portion of income put into retirement plans.

Again, a number of lawmakers want the federal government to take a more active part in control of narcotics, barbiturates and amphetamines and treatment of addicts. One suggestion is to consider any shipment of barbiturates or amphetamines as a part of interstate commerce, on the theory that intrastate control is essential to interstate control. This and other bills also call for strict record-keeping and registration (physicians excepted from these provisions).

A plan introduced in the last session and offered again would give the President the right to assume control over the production, distribution and use of any drugs or biologicals "for use in the prevention and treatment of disease."

Other medical bills will of course be introduced as the session moves on; those discussed here already are assured of considerable attention.



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A 27-year-old man, a chronic alcoholic, was admitted with a history of an alcoholic spree followed by a cough, greenish sputum and chills and fever.

Physical examination showed a temperature of 104 F. and indicated pneumonia in the right lower lobe. This was confirmed by X-ray. The sputum revealed gram-positive diplococci and blood culture subsequently grew Type VII pneumococci.

The patient was treated with erythromycin, 300 mg. every six hours per os. His temperature dropped to normal by 48 hours and X-ray of the chest revealed considerable clearing by the fourth hospital day. After 10 days hospitalization, the patient was fit for discharge.¹

At the First Antibiotics Symposium, we reported the successful treatment with erythromycin of *H. influenzae* pneumonia and bacteremia. A second patient with *H. influenzae* pneumonia and bacteremia had a clinical course almost identical to the one previously reported, with cure obtained by treatment with 500 mg. of erythromycin per os every four hours for 14 days.

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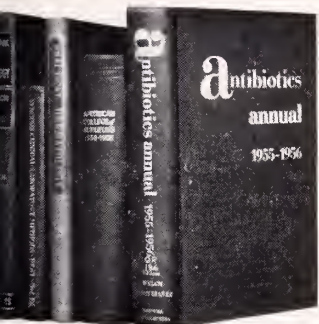
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1. Romansky, M.J., et al., *Antibiotics Annual 1955-1956*, p. 48,
2. Waddington, W. S., Maple, F. C., and Kirby, W. M. M., *A.M.A. Archives of Internal Medicine*, 1954, p. 556.



IN THE BOOKS



EPILEPSY AND THE LAW: A Proposal for Legal Reform in the Light of Medical Progress: Roscoe L. Barrow and Howard D. Fabing, M.D.: Hoeber-Harper Company, New York, 1956: 177 pages, \$5.50.

This volume by a lawyer of well recognized academic standing and a physician who has spent many years in understanding the social as well as the medical problems of the epileptic presents the culmination of the work of the Special Committee on Legislation of the American League Against Epilepsy.

The authors were able to obtain information from administrators of most of the forty-eight states with particular reference to laws concerning the epileptic insofar as they had to do with marriage, sterilization, drivers licenses and workmen's compensation.

In analyzing such laws affecting epileptics, it was found that the survey would be incomplete without an inquiry into applicable administrative practices. Statutes which make no specific reference to epileptics are drafted in such broad terms that the administrators of the statutes may construe them to apply to epileptics.

Actual data from the statutes and laws of the various states are cited and the difficulties encountered in their enforcement are noted. This volume offers a valuable source of material to physicians, lawyers, social workers, administrators, and anyone whose interest either directly or indirectly involves the epileptic individual.

Of particular value are the final chapters in which recommendations in the drafting and operations of laws insofar as they have to do with the epileptic are made. As a result of the Committee's work more effective eugenic marriage laws have been made in such states as Wisconsin, Connecticut, Kansas and North Carolina. With increasing interest it is reasonable to expect success in other spheres in many of the other states.

This book may be used, as the authors suggest, as "a blue print for social action which will permit us to atone for more than 2,000 years of error in the management of the epileptic patient."

E. Roseman, M.D.

BONE STRUCTURE AND METABOLISM: Ciba Foundation Symposium. Wolstenholme, G. E. W. and O'Connor, C. M., Eds. Little, Brown and Co.; published 1956, 292 pages: \$8.00.

Some thirty outstanding representatives from the fields of the basic sciences and clinical medicine, and from many parts of the world, participated in this symposium in order to throw further light on our knowledge of the very important dynamics of the skeleton.

The attitude of the assembled group and the objectives of its meeting are set by the chairman, Prof. C. E. Dent, of London. "—We each know a great

deal about certain narrow aspects and are painfully aware of our ignorance of almost everything else . . . May I suggest also that in the next few days, we act not so much as members of a Symposium . . . but as simple members of a family gathering, brought together from all parts, many of us strangers, but all of us already closely knit by a common loyalty and ideal."

In this spirit bone structure and behavior are examined minutely from the physical and chemical viewpoints. Use is made of such innovations as micro-radiography-x-ray histology, it might be called—and isotope studies to investigate development, metabolism, and repair of bone and its important participation as a homeostatic system of the body.

Later in the symposium repair of fractures is studied, and the actions of vitamin D are explored from experimental and clinical angles; this latter category includes a highly interesting presentation by Prof. Fanconi; whose name will be familiar to some readers. Two presentations deal with the tricky problem of assessment of parathyroid function. Following each presentation there is informal discussion; refreshing to this reader was the total absence of any empty congratulatory remarks, and the presence of frank and animated examination of the material by dedicated scientists.

This volume will not appeal strongly to the usual clinician. Much of the content presupposes a familiarity with methods and information which is rare outside the realms of pure research. On the other hand, the orthopedist, the urologist, the pediatrician and the endocrinologist should find messages here whose interest is heightened by knowledge that they represent the best thought available today. As Prof. Dent says . . . we are always ultimately dependent on the basic scientist, whose work we must make serious efforts to comprehend, even if it may appear at first sight to be somewhat remote from ordinary affairs."

James Robert Hendon, M.D.

HANDBOOK OF PEDIATRIC MEDICAL EMERGENCIES: by DeSanctis and Varga; published by C. V. Mosby Co., St. Louis; 389 pages; price \$6.25; 73 illustrations.

The second edition of this Handbook now has ten contributors as well as the authors. The first chapter on "Cardiovascular Abnormalities" is very well written and the dosage of drugs useful in cardiac emergencies is very well done. However, the rest of the book leaves a great deal to be desired.

As an example, in the chapter on "Metabolic Emergencies," in one section a water requirement of 1500 cc. per square meter per day is suggested. For a

(Continued on Page 229)

(Continued from Page 228)

ten kilogram child this would be approximately 750 cc. In another table in the same general section, the fluid requirement for a ten kilogram child is given as approximately 1250 to 1300 cc. This discrepancy certainly leaves one confused, as do certain other discrepancies in this chapter. These are difficult to explain except as an attempt by the authors to cover numerous theories in a limited space. The section of this chapter designated as "Dangers of Parenteral Therapy," however, is an exception to this criticism.

The genitourinary emergencies are treated in the usual manner. The outline for diagnostic procedures of an abdominal mass is excellent. There is a suggestion in this chapter that recommends magnesium sulfate for convulsions even in the presence of uremia. Though magnesium sulfate for the treatment of convulsions, per se, has long been utilized, one of the dangers to be avoided is extreme depression due to accumulation of the magnesium ion. The occurrence of anuria greatly facilitates this rise of the magnesium ion to a toxic level. The usual antidote suggested for this drug is calcium gluconate intravenously.

The reminder that open drop ether may be used to control convulsions is appreciated especially at this time when so many intravenous barbiturates are used rather extensively.

This book gives a good argument for the use of lumbar punctures in head injuries, and clearly points out the indication for such procedures. I must say, however, that there is strong indication that increased intracranial pressure from acute head injuries is affected very little, and not at all advantageously by spinal puncture. This remains a confusing and arbitrary point.

The recommendation, that penicillin be routinely administered intrathecally for bacterial meningitis, seems rather unnecessary and has not been used on the Pediatric Service of the University of Louisville Medical School for some five years. The outline for therapy in tuberculous meningitis should be quite helpful.

Despite these obvious disadvantages, the Handbook is useful and helps to organize one's approach to various types of emergency therapy.


The last section, which is on Procedures, is well done and the section on Poisoning is satisfactory.

Joseph A. Little, M.D.

✓ Omission

The name of Hollis Johnson, M.D. was inadvertently omitted in the February issue of The Journal as reviewer of the book, "The Neuroses in Clinical Practice," by Henry P. Laughlin, M.D.


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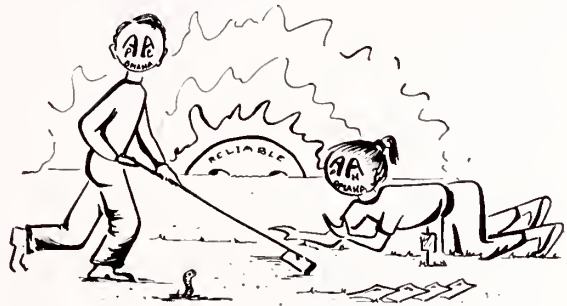


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PRESENT STATUS OF CHEMOTHERAPY FOR TUBERCULOSIS*

PAUL T. CHAPMAN, M.D.

Detroit, Michigan

THE treatment of tuberculosis by chemotherapy dates back many years. Prior to 1944, however, no agent of value had appeared. At this time Waksman and others at Rutgers discovered streptomycin and within two years this substance was started on extensive clinical trials. The early results with streptomycin were based on its use as a single drug. While there could be no doubt that it had marked initial influence on the course of tuberculosis, it soon became evident that the appearance of resistant organisms, resulting thereby in drug neutralization, limited its usefulness. Seventy to ninety per cent of cases which failed to convert the sputum in three or four months developed resistant organisms in the sputum. Further treatment with streptomycin in the face of developing resistance was not profitable thereafter. Failure to convert sputum occurred most frequently in cavity cases. At this time most clinicians continued to employ various collapse measures then in common use, such as pneumothorax, pneumoperitoneum and phrenic crush. Chemotherapy was considered an adjunct to total treatment of the patient. With the discovery of para-amino-salicylic acid (PAS) a new agent was added to our armamentarium. It was soon evident that PAS could produce a definite, although much less impressive effect, on tuberculosis than streptomycin. Early work with guinea pigs showed that when these two drugs, streptomycin and PAS, were given together it was possible to get an enhancement beyond what might be expected from each drug individually. It was not long thereafter that patients began to receive streptomycin and PAS simultaneously. The experience with streptomycin alone, however, discouraged prolonged

use of the combined drugs since it has been shown so universally that streptomycin lost its effect after 90 to 120 days. All forms of collapse therapy continued to be needed about as much as previously. Using short courses of combined chemotherapy, the clinician might give it to a far advanced case initially as a life saving measure and then stop by the third or fourth month before resistance became obvious even though the disease was far from controlled at that time. If the patient continued to improve without the drug after the first course he might ultimately qualify for major surgery at a later date when the drug combination would be resumed with the hope that some bacteriostatic effect still persisted. This would allow greater safety for major surgery. Previous experience with resectional surgery without chemotherapy had been marred by a large number of bronchogenic spreads, fistulae, and late relapses.

Not until 1949, and then more or less by accident, was it discovered that the combination of streptomycin and PAS had bacteriostatic effect continuing well beyond three or four months. A surprising number of people treated with the combination became negative and brought their disease under control bacteriologically, clinically and by x-ray. Even those with persisting cavities after eight or ten months of treatment could be subjected to resectional surgery with greater safety under apparent cover from continuing effective chemotherapy. These early results were substantiated by others and as a result prolonged combined chemotherapy became by 1952 the accepted method of treatment. It was noted incidentally that if treatment was interrupted for significant periods of time, resistance in the bacterial colony might make its appearance and re-treat-

*Presented at KSMA Annual Meeting—Sept. 1956

ment of such patients was much less predictable.

In 1952 a third major drug, isoniazid, made its appearance. Soon after the drug became available large cooperative clinical studies were sponsored by the Public Health Service, the Veterans Administration and the British Research Council in England. The initial objective of most of these studies was to establish the relative merits and limitations of isoniazid, using streptomycin combined with PAS as a standard for comparison. There have been numerous comparative studies made by these three large groups as well as others working independently. There is no time in this paper to present more than the briefest of these results. As these and other studies have progressed it has become evident that isoniazid possesses superior bacteriostatic qualities to any other available drug including streptomycin. Several years of clinical evaluation of these drugs, as well as others, has increased our knowledge of their limitations and relative usefulness but considerable remains to be learned. For brevity and clarity it may be convenient to try to state the relative merits of the drugs now available to us according to some simple scheme. To that end the following is submitted.

First Choice Drugs

Isoniazid: Although in general combined therapy is still the rule, there may be a few circumstances in which the use of isoniazid alone is accepted. One of these situations may be in prolonged out patient chemotherapy which is continued after apparent control of the disease has been obtained and when, because of economy, convenience or because of other drug intolerance isoniazid may be given alone. The use of isoniazid in recent tuberculin converters and in children with uncomplicated active primary tuberculosis to prevent possible tuberculous meningitis in the children is being studied and still awaits further evaluation. It is not at this moment a recommended policy although doubtless more will be reported. In most circumstances it is combined with one of the other drugs when treating pulmonary tuberculosis or in extra pulmonary tuberculosis. In all panic situations such as miliary or meningitis or miliary-meningitis the use of isoniazid is considered mandatory at this time. The daily dosage commonly employed is in the range of 4 to 6 mg. per kilogram of body weight. In

panic cases 10 mg. per kilogram is employed at the onset, being reduced to a lower level after the first two to four weeks, depending on clinical developments. Recent observation on the rapid acetylation of isoniazid has led some to suggest a minimum of 8 to 10 mg. per kilogram in all cases, since higher dosages are warranted apparently in any individual who may be a rapid acetylator because he would need extra drug if he is to receive adequate effect. We are not well informed at this time how frequently this phenomenon of rapid acetylation occurs. Comparative studies on a large series of cases failed to show any statistical advantage of the higher dose of 10 mg. per kilogram as compared to a lower dose of 3 to 5 mg. per kilogram. This would suggest that the number of rapid acetylators is small, although among the failures it may be large. In any event, when using 10 mg. or more of isoniazid it is recommended that 100 mg. pyridoxine (B-6) be given the patient daily as well.

Streptomycin remains an excellent drug in the treatment of tuberculosis but has had to yield the pre-eminent position to isoniazid as a result of comparative studies. The usual dose of streptomycin is 1.0 gm. per day, given twice weekly or every three days, often combined with PAS in the old standard streptomycin-PAS combination. The majority of clinicians treating tuberculosis in institutions prefer the old streptomycin to dihydro-streptomycin because if toxicity occurs the damage to the vestibular apparatus is less incapacitating than is loss of hearing. This hazard is greater if daily streptomycin is given.

Para-amino-salicylic acid is an important part of chemotherapy and is found in combinations now being used. It is an extremely valuable drug and continues to hold a pre-eminent position in our present plan of therapy. Streptomycin was saved as a useful drug by the addition of para-amino-salicylic acid. Recently the importance of acetylation in isoniazid metabolism has re-emphasized the value of PAS. It appears that PAS is competitive in the acetylation process with isoniazid and therefore when it is used in combination it tends to make available more free isoniazid in the serum. Toxicity from PAS is of a fairly frequent order and usually manifests itself as gastro-intestinal disorders, although occasionally other manifestations such as skin allergies occur. In an effort to overcome the disadvantages, particu-

larly of the gastro-intestinal type, which occur with PAS and because of the general patient reluctance to accept this medication, a number of efforts have been made to reduce the amount of dosage.

The standard dosage is 12 of the acid to 15 grams of the sodium salt. This is a rather large order for many patients. Recent efforts to reduce this dose to 6 grams have been studied by the Public Health Service. Preliminary information on this point would indicate that the results are comparable with the full dose. In combination with isoniazid there is the possibility that in rapid acetylators the low dose of PAS might not be completely effective. Further study and simpler tests for acetylation will probably help us resolve this point. In addition to sodium PAS there are a number of compounds such as calcium PAS, potassium PAS, Rezi PAS® and coated PAS which have been developed to make this material more acceptable and to meet certain situations. Substitution of these compounds for sodium PAS may be effective and acceptable. Liquid PAS should be guarded against sunlight and over aging beyond a week.

Second Choice Drugs

Viomycin is a drug of inferior potential. It is used in 2 gram doses usually twice a week. It, like streptomycin, is neurotoxic and may be nephrotoxic too. It has independent action from streptomycin so if streptomycin fails it can be substituted for it. However, the clinical effect of this material seems less positive than with streptomycin. It is usually used in treatment failures and therefore operates under a handicap. Its use with streptomycin is rather hazardous since these drugs are probably additive in their toxicity. Occasionally viomycin can be used to tide the patient over a critical period such as through surgery.

Oxy-tetracycline has tuberculostatic qualities and is usually given in 1.0 gram dose daily and in combination with either first line or second line drugs, sometimes with streptomycin or isoniazid, or as often happens in treatment failures, with viomycin. The tuberculostatic effect is of a low order. Despite the broad spectrum effect, patients have been carried for many months on oxy-tetracycline without having had serious difficulty from over-growth of other organisms of the gastro-intestinal tract or in the respiratory tract. Diagnostic difficulties may arise if antibiotics of this type are applied rou-

tinely to patients with pulmonary disease in whom careful bacteriological studies have not been started. It is conceivable that a positive sputum might be missed under this practice and an erroneous diagnosis might be made even though tuberculosis was present.

Third Choice Drugs

Pyrazinamide because of limited clinical application has not a secure position established as of this time. It has been used in various dosages although experimental work indicates that a dose of about 40 mg. per kilogram is the most effective. It is given by mouth and it has a potentiality of severe hepatotoxicity. Comparative studies of toxicity indicate that the majority of toxic reactions occur after the first sixteen weeks. It offers a possible use in short term circumstances and it has been shown by animal studies to have, particularly in combination with isoniazid, a considerable potential as a tuberculostatic agent. It is possible that a short term course of pyrazinamide combined with isoniazid or with streptomycin may gain a place in treatment. If pyrazinamide in combination proves successful then we might have two alternative combinations, mutually exclusive, isoniazid-pyrazinamide on one hand, PAS streptomycin on the other. This would give us a considerable advantage in therapy.

Cycloserine (oxamycin), the latest anti tuberculosis drug to be introduced, has recently been released to the profession. This drug is still more or less experimental despite this fact. It was used originally as a single drug and resulted in relatively moderate to slight improvement in patients. The toxicity studies which have been made indicate that the drug has considerable potential for central nervous toxicity of the convulsive type and is dangerous at a level of 1.0 gram per day. While the drug itself is much less potent than is isoniazid experimental studies in animals indicate that it has a considerable promise when combined with isoniazid. This is currently being studied and the reports are available only in preliminary form. The possibility that cycloserine may be an effective agent combined with isoniazid should not allow its toxicity to be overlooked. Out of a series of more than 20 individuals in our hospital who were submitted for cycloserine tests, only one showed definite improvement under its use. It should be admitted, however, at this point that all these patients had been

serious treatment failures with other drugs. Cycloserine probably can be administered to most patients at 0.5 gram per day with safety.

Currently Acceptable Drug Combinations

Isoniazid and PAS as a combination appears to be about the best available at this time. It has the advantage of being all oral, therefore can be administered to both the in-patient as well as the out-patient with the least amount of difficulty. The drawback of course is that PAS has to be taken and this produces difficulties from the standpoint of patient acceptance and of toxicity. Nevertheless, from the standpoint of sputum conversion and favorable change by x-ray this combination is as good as any that we have observed. In addition to this it is economical. The usual daily dose is 4 to 6 mgm. of isoniazid per kilogram of body weight and 12 to 15 grams of PAS. Higher doses of isoniazid may become popular, particularly if it is conclusively shown that acetylation is a more important problem than we have heretofore suspected.

Isoniazid-streptomycin and PAS. This so called "triple drug" therapy has been used in the treatment of patients often by default, sometimes by deliberate choice. It is true that any patients who are acutely ill may get all three drugs. There is at the present time relatively little support, however, for the use of this combination in anything other than "panic" situations because it cannot be shown to be superior. In a panic situation its use is justified because one doesn't know with certainty the potential of each drug at the moment. It can be shown that the amount of toxic difficulty is increased when all three drugs are used simultaneously.

*Isoniazid and streptomycin.** Streptomycin is given every third day or twice weekly. This combination in comparative studies showed a considerable ability to convert sputum and to clear infiltrations and close cavities. It is, however, disadvantageous because of the commitment of our two best drugs, isoniazid and streptomycin, at one time without the protective help of PAS. If resistance does occur to one of the

*Isoniazid combined with streptomycin given daily has been reported as superior by the British Medical Research Council as regards both bacteriological and x-ray changes. This is currently under study in this country. In the event of failure we may find loss of effectiveness of both major drugs and also there is more risk from toxicity when daily streptomycin is given in prolonged fashion.

agents the bacilli are usually resistant to both in short order.

Usually drug combinations involving the drugs listed as second or third choice represent substitutions for first choice combinations. Such substitutions are often dictated by toxicity or hypersensitivity of the host or because resistance has occurred. Some of these combinations such as isoniazid with pyrazinamide for a limited time or isoniazid with cycloserine may gain a more secure place although this is not established as yet.

Duration Of Treatment

The length of chemotherapy varies greatly, being dependent on the rapidity with which the disease comes under control. It has been shown that control of the disease develops faster when isoniazid is used in combination, however, other background factors such as previous chemotherapy, extent of disease, duration of illness, and age of patient will influence the result, too. In fact so important may these be that it may be impossible to accomplish control through chemotherapy alone. In these circumstances it is necessary to use collapse therapy or resectional surgery. It is obvious that a variable period from a few months in the most favorable cases to a year or two in more complicated and advanced cases may be necessary to reach a control point. The duration of therapy after the point of stability of x-rays, closure of cavity, and conversion of sputum is largely empirical. Some clinicians advocate 12 months although our average is probably only about 8 months after control is obtained, with excellent results so far. Total chemotherapy should probably be 18 months or longer in the advanced case and never less than 12 months in any case. Indefinite chemotherapy may be recommended for so called "open healed" cavities and in others with repeated relapses. Such regimens are usually dictated by our inability to use definitive surgery and usually represent a tenuous hold on the disease.

Collapse Therapy

Chemotherapy has displaced collapse therapy from its position of importance. Pneumothorax, pneumoperitoneum and phrenic surgery have a greatly reduced role. The more stubborn residuals such as open cavities persisting after chemotherapy of several months are better treated with resectional surgery. Thoracoplasty

still has a limited place for collapse of disease as well as to obliterate spaces remaining after the more extensive resections such as lobectomy or pneumonectomy.

Resectional Surgery

The removal of open cavities and dense residual lesions has become common. With chemotherapy the more inflammatory elements of the lesions resolve fairly rapidly and within a few months it is usually possible to identify the more stubborn lesions which will persist. These may be either open cavities, inspissated cavities or unsloughed caseous areas. Combined chemotherapy permits a careful evaluation and reduces the risk of complication by spread, empyema or fistula when surgery is performed.

The indication for resectional surgery for "closed lesions" is a matter of debate. At present there is less enthusiasm for removal of small lesions particularly under 2 cm. in size because follow-up fails to show significant differences between the resected and unresected cases. Larger solid lesions and persisting open cavities should be resected if the patient's condition permits.

Premature decisions for surgery may force a more extensive resectional procedure on the surgeon than is necessary. Since pneumonectomy carries about four to five times the risk of mortality of lobectomy, it is obvious that some delay of decision for pre-operative chemotherapy up to 8 or even 10 months may be profitable. At present the majority of resections are segmental or subsegmental in extent.

Hormone Therapy

A small number of acutely ill patients may be benefitted by the use of ACTH or cortisone in addition to chemotherapy. These patients are desperately ill but have predominantly acute exudative disease and presumably a fair amount of "reversible" disease. When the patient shows poor response, especially in early treatment such hormone therapy may be life saving. These hormones usually are not needed for more than a few weeks if a favorable outcome is probable. The indiscriminate use of them in other than desperate cases is likewise condemned.

"Open Healing"

An end product of present day chemotherapy may be the so called "open healed" cavity.

Such lesion if amenable to surgery should be removed but in some patients there is so much destruction that this cannot be done. While it no longer can be denied that a pathological and bacteriologically healed cavity may result from present day chemotherapy it must be a relatively rare occurrence. One series of resections showed only 6% were "open healed." We feel that the great majority, that is two-thirds to three-quarters of persisting cavities after long treatment are active despite negative sputum. Whenever possible these should be resected and if not hospitalization should be extended, and if finally the patient is discharged there must be long term careful follow-up with chemotherapy indefinitely thereafter.

Discussion

The shift in emphasis in treatment has been so much toward chemotherapy that one may lose sight of the many other factors contributing to success or failure in the treatment of tuberculosis.

One of the first considerations of treatment should be the prevention of contagion wherever possible, and this usually means some form of isolation, particularly during the early phases of the disease. When first discovered tuberculosis is often communicable and at this time every effort should be made to teach the patient about his disease and to get him in a position where he cannot and will not expose others needlessly. Hospitalization should be effected and proper treatment initiated promptly. A variety of considerations are currently brought up why people should be treated at home and it must be admitted that there may be some situations where this probably is the only way the patient can be treated. However, when one considers the unlikely prospects of advanced cases doing well under such haphazard circumstances, the general recommendation to start therapy in the hospital still applies.

In analyzing the factors which influence the result of treatment it has been shown that several of these are very important. One is extent of disease. The more extensive the disease process in the lung, the less likely that we will be able to gain control through chemotherapy. The more advanced the case the less certain is the result. Secondly, the older the disease, particularly if the disease has been present two years or longer, the less certain is the result. Thirdly, the age of the patient adversely influ-

ences the result as one gets older. For example, a fairly even distribution of treatment failures in increasing amounts, about 10% per decade, were shown as one progresses from age 20 to over 60.

Finally, males do considerably poorer than females. This is probably another way of stating that they have more advanced disease and they have had it longer before treatment has been brought to bear. All these factors of course are complicated considerably by the presence of previously treated disease. Treatment failures tend to reduce the possibility of subsequent good results.

The importance of a good therapy plan initiated in the hospital is very obvious in the advanced case. Even with our best chemotherapy success is not inevitable. Furthermore in the more difficult cases we must plan for possible surgery particularly if large cavities are present or if the disease is long standing. Each phase of treatment including rehabilitation and post hospital chemotherapy should be provided if we are to profit from our recent gains. Further evaluation of all aspects, particularly long term follow-up, will be necessary since even the best chemotherapy is chiefly bacteriostatic.

Conclusion

1. Chemotherapy of tuberculosis depends on three major drugs, isoniazid, streptomycin, and PAS. The best of these is isoniazid. In clinical

tuberculosis the principle of combined chemotherapy still holds. Among the number of possible combinations isoniazid and PAS offer certain advantages and is of first choice in our experience. Triple drug therapy for itself shows little advantage but may be used in panic situations where one cannot risk the possibility that one of the agents is ineffective. Streptomycin-isoniazid in combination using daily streptomycin is currently under study and may be a worthwhile combination. However, this combination runs the risk of having both major drugs rendered ineffective and apparently at this time would not be the first choice regimen. Streptomycin-PAS, the old standard, is acceptable but is not first choice.

2. In addition to chemotherapy other factors influence the results. Some of these are age, sex, duration of disease and extent of lesion.

3. Chemotherapy in many instances is not sufficient since many of these individuals are advanced when first seen and some have had other chemotherapy and may be resistant to the best drugs. In any event, all cases of tuberculosis should have a carefully thought out plan, which should include the availability of surgery and all modern techniques of diagnosis and treatment to get the best results.

4. Despite the advantages of chemotherapy, in the majority of instances it is best to start treatment in the hospital. This allows adequate evaluation, good orientation and prevents contagion.

THE RECOVERY ROOM

The postoperative patient who goes to the recovery room receives care by nurses and aides who are giving their entire thought and time to the welfare of this patient. It is a source of great comfort to the surgeon and anesthesiologist with busy schedules to know that the patient is being watched over carefully during this critical few minutes or hours. Patients' families have been quick to accept and even expect this great advance among a long list of advances offered to the patient by hospitals and physicians.

E. H. Baker, M.D.
Louisville, Kentucky

PELVIC ENDOMETRIOSIS*

FRANK L. McPHAIL, M.D.

Great Falls, Montana

PELVIC endometriosis is a relatively common yet confusing disease. It is a diagnosis that is frequently missed. Confusion may arise because it is not the disease so much as the resultant fixation and adhesions which produce the symptoms. Endometriosis is associated with infertility and sterility, yet observation at the time of Cesarean section reveals evidence of endometriosis in a surprisingly large number of patients. Women having endometriosis do not necessarily have pain and most of them ovulate. The disease may not produce sterility, but the resultant fixation and adhesions may.

Even though much is published about endometriosis, it is frequently not diagnosed or is misdiagnosed. It occurs in about 25 per cent of all gynecological major surgery, and possibly the incidence is as high in medical gynecology. By missing the diagnosis before surgery, the gynecologist is faced with a dilemma during surgery because neither he nor the patient is prepared for definitive decision. Surgical treatment is too often instituted when medical treatment might suffice. As it is a disease which may affect young women anxious to have children, great care must be exercised in the management. My primary concern is that endometriosis should be suspected and that the patient have the advantage of carefully planned management.

Problems Of Diagnosis

We must depend upon the gynecologic history, liberally sprinkled with general information regarding the gastrointestinal, bone and joint, and neuromuscular systems to create suspicion. We believe that the symptoms are, to a large extent, produced by secondary fixation and adhesions. The most common complaints in 186 consecutive patients, treated in the last five years, are as follows:

COMMON SYMPTOMS OF ENDOMETRIOSIS

COMPLAINT	NUMBER OF	
	CASES	PER CENT
Dysmenorrhea	118	63.4
Lower Abdominal Pain	76	40.8
Menorrhagia	62	33.7
Sacral Backache	56	30.1
Pelvic Pressure	38	20.4
Gastro-Intestinal	34	18.3
Dyspareunia		
Mild or Occasional	28	
Severe	15	
All Cases	43	23.5

The development of these complaints is important. If dysmenorrhea is acquired, endometriosis should be suspected. The same is true of dyspareunia. Many other complaints, such as uterine bleeding in the form of a brownish discharge before or after the period; pain in the inguinal area; pain in the thighs; shooting, rectal pain; and pain referred to the kidney area, may be noted as suggestive signs.

The diagnosis of pelvic endometriosis rests largely on the pelvic examination. Careful attention to the patient's history may lead us to suspect the disease. Because of the frequency of endometriosis, we should ask the question, "Can this be endometriosis?" at every gynecologic examination. The diagnosis must be made during the bimanual examination, if we are to hope for correct management, and physical findings must be present before operation is advised. The posterior cul-de-sac and uterosacral ligaments must be palpated both vaginally and rectally in every patient. The presence of tender nodules on the uterosacral ligaments is almost diagnostic. Tenderness and nodules in the recto-vaginal septum are equally important findings. Adherent, enlarged ovaries (without history of infection), adherent retrodisplacement of the uterus (painful on motion), and a shallow posterior fornix with resistance and thickening, all suggest endometriosis.

I feel that each patient should be examined at least twice. Once should be in the silent interval between two menstrual periods. The pain is less severe at that time and the examination can be more complete. The other occasion should be just before a period is to begin. The definition of pain and the delineation of masses can be accomplished most easily at this time.

*Presented before the Ky. Obstetrical and Gynecologic Society on Sept. 19, 1956, during the KSMA Annual Meeting.

If the history reveals sterility, acquired dysmenorrhea or dyspareunia, rectal pain or sacral backache, one should suspect endometriosis. If the examination reveals tender nodulations on the uterosacral ligaments or in the rectovaginal septum, tender, adherent, prolapsed ovaries or an adherent, painful retrodisplacement, endometriosis is a real probability. By careful correlation of the history and physical examination, psychosomatic diseases should be considered seriously and ruled out before any surgical treatment is considered. This is important.

Approximately one-fourth of all women coming to gynecological surgery have endometriosis. Of these, two-thirds, or 16 per cent of all, have significant lesions. The age distribution of these patients is important, for it is rare that a woman over 40 is greatly interested in preserving fertility at the expense of physical discomfort. It is equally rare that a young woman is willing to give up the right of reproduction, even though she may have to endure some pain to preserve it. The age incidence in our series follows:

DIAGNOSIS	ENDOMETRIOSIS—AGE INCIDENCE			TOTAL
	UNDER 30	30-40	OVER 40	
Incidental	...	14	44	58
Significant	21	82	25	128
TOTAL	21	96	69	186

In these patients, the diagnosis was incidental (that is to say, the endometriosis was asymptomatic) in 31 per cent, or 58 cases. The diagnosis was made in the course of treating some other pelvic condition, and specific treatment of endometriosis was not indicated. 44 of the 58, in whom the diagnosis was incidental, were over 40 years of age and desire for childbearing was not a factor. In the remaining 69 per cent, or 128 cases, pelvic endometriosis was a significant diagnosis. Of these, 21 were under 30, and 103 were under 40 years of age. Only 25 were over 40. Our concern is with the larger group, 103 out of 186, or 55 per cent of this series. The management of endometriosis in this age group is very important.

Management

Management is dependent upon a correct diagnosis and an accurate evaluation of the potentialities of the various types of treatment. The history and physical examination may lead the gynecologist to suspect endometriosis. I

feel that a provisional diagnosis is justified on the history and physical examination. It is then possible to discuss provisional management with the patient and her family. Several considerations are important. The first is the age of the patient. If young and unmarried, great patience is necessary, and with these patients I try to avoid the question of surgery, at least until other measures fail. If the woman is over 35 and has no desire for more children, her age is not a problem. The second consideration is severity of symptoms. Here, the psychosomatic aspect must be most carefully evaluated. If the patient becomes a semi-invalid for two weeks out of every four, we have a definite responsibility. On the other hand, if the severe symptoms are restricted to 2 or 3 days at the beginning of the menstrual period, some form of pain relief may be all that is necessary. The third consideration is the desire to bear children. This should be thoroughly discussed before any surgical approach is contemplated. The fourth consideration is the desire to retain ovarian function. This has a strong psychic appeal to a large number of women. They may understand that they retain femininity by retaining ovarian function. These women may accept the loss of their uterus and menstruation without prejudice, but the loss of ovarian function may create serious psychiatric disorders, even though the situation has been most carefully explained. The fifth consideration is an economic one. Many of these women are self-supporting and can afford neither the recurrent loss of productive time nor frequent hospitalization. The sixth consideration is the possible risk of malignancy. I would like to discuss this later.

Prophylactic Management

It seems logical to approach the overall management of endometriosis, because of these considerations, from the standpoint of prophylaxis, palliation and cure. There is no such thing as prophylactic management. Gardner states, "There is nothing worthwhile to suggest, now, to prevent the genesis of endometriosis, regardless of the theory or theories of histogenesis that might motivate the proposal (and that includes Meigs' plea for earlier marriages and earlier pregnancies)." Prophylactic treatment might be considered as "no treatment," and "no treatment" is justified in many patients.

The consideration of any conservatism in regard to endometriosis must also take into account the possibility of it being a precancerous lesion. Scott has stated, "Although there seems to be no reason to induce alarm, possibly it is time that our teaching be modified and that external endometriosis be considered at least as potentially capable of malignant transformation as normally located endometrium." This need not change our attitude. We may still reassure our patient, for as Gardner, in referring to Scott's statement, remarks, "Being potentially capable connotes nothing more than existing as a possibility, not an actuality." In our series we have found no ovarian carcinoma in patients having endometriosis of the ovary. Two patients have had carcinoma of the endometrium as well as external endometriosis, with no malignant change in any of the external endometriosis removed. I feel that we need have no fear in reassuring any patient in regard to the malignant potential of endometriosis.

In the young woman, nothing can be done to prevent the development of endometriosis. There is no need to fear malignant change, granted that we admit it is possible but not probable. It is doubtful that we can guard against recurrence, progress or spread, if endometriosis is present. There are, however, many women who have endometriosis who need no treatment. An understanding of the disease, a proper outlook, and possibly a moderate amount of aspirin and even a little codeine, may suffice for these women. At least some years may be gained and some pregnancies may be made possible.

Palliative Management

Pregnancy is possibly the greatest of all palliative agents. The young woman in whom we are most anxious to preserve fertility is the one to whom palliative treatment is most important. Gardner considers palliative treatment under three headings: watchful expectancy, temporary inhibition of cyclic activity (with relief of symptoms thereby) and corrective surgery.

Watchful expectancy. Many patients, as mentioned before, have minimal symptoms and require no treatment. These patients should be followed by routine, planned observation at regular intervals. We are following these patients on an acknowledged, presumptive, clinical

diagnosis. We admit that the diagnosis may be incorrect. Some of these patients may have other pathology so it is possible to criticize, and correctly so, this type of follow-up. I feel, however, that watchful expectancy is justified, because we operate promptly when in doubt. At times, the progressive changes in endometriosis and some complications cannot be separated, and exploratory operation is justified. With this type of management, the patient must cooperate completely and return regularly for follow-up, if other disease is to be ruled out. Complications that must be considered are ovarian carcinoma, genital tuberculosis and carcinoma of the rectum. As the latter is a mucous membrane lesion, proper studies should leave no doubt about it being an undiscovered lesion. My experience with watchful expectancy has been most gratifying. If all of these women are given a full explanation, most of them will cooperate completely and unnecessary surgery may be avoided.

Temporary inhibition of cyclic activity may be accomplished by x-ray. This procedure is mentioned only to condemn it. Patients vary so much as to individual susceptibility that accurate calculation of dosage is out of the question. The danger of permanent castration and permanent ovarian damage is present. In case of permanent castration, permanent change in vaginal mucous membranes, such as dryness, itching and kraurosis must be remembered as possible complications. The end results in our series of x-ray castration for other conditions has been such that we have discarded it as a therapeutic measure, except in rare situations.

Hormones. We realize that this type of treatment is debatable. Yet, I feel that before surgery is considered the patient deserves a trial of hormone therapy. About 60 per cent of our patients treated by androgens have had fair to good palliation. In our experience the undesirable side-effects, acne, hoarseness and hirsutism, have not been great. We favor androgens over estrogens because a normal menstrual cycle with ovulation continues in most patients. As we are usually concerned in treating patients who desire fertility, we favor androgens over estrogens which seek to relieve the patient's symptoms by suppressing ovarian function. The usual course of treatment has been 5 mg. of methyl testosterone sublingually each day for 90 days. We have had to repeat this course in some, and in an occasional patient have kept up

some type of continuous treatment. One patient takes 5 mg. of testosterone every fourth day. She has followed this plan for 7 years and has had two full term pregnancies in that time. Another patient seems to control her pain best by taking 5 mg. daily for one week before each period. She, too, has had one conception while taking testosterone, and delivered a normal, full term baby. We have treated 21 patients under 30 who had a clinical diagnosis of endometriosis, during the past 5 years. These 21 have been rigidly selected, and we feel that the symptoms are significant from the standpoint of pain, dyspareunia and/or dysmenorrhea. Of the 21, only 15 have tried to conceive. Nine of these women have conceived. I feel that this is a satisfactory result and plan, in the future, to delay surgery in those women who desire children and in whom pain can be relieved or in whom pain is not a serious factor, and in whom no serious diagnostic difficulty is presented.

Conservative surgery. The physical findings of endometriosis must be present before surgery is advised. A careful and detailed history accompanied by pelvic examination, including palpation of the uterosacral ligaments and rectovaginal septum, will increase the number of suspect endometriosis lesions. To suspect the disease makes it possible to have a complete discussion with the patient and her family before surgery. Such a discussion makes it possible to know the wishes of the patient and to make surgical plans which will be agreeable to the patient, even though secondary surgery may become necessary at a later date. It is well to advise the patient, before surgery, that the extent of the lesion may be difficult to evaluate. At the time of surgery it is possible that much more pathology may be found than is expected. In some, the findings may be less. It is in this group that some neurosis may be present. The finding we found most frequently associated with severe pain was prolapsed, fixed, adherent ovaries. The ovary drops into the cul-de-sac between the pelvis and the retroverted uterus. These patients may be relieved by excision of the endometriomas, and by suspension of the uterus and ovaries. One of our patients had such severe pain that coitus was almost never attempted. Following suspension of the uterus and ovaries and a course of testosterone, she has had two normal children and is now pregnant a third time. She has had recurrence of

some pain on two occasions, but each time the pain has yielded to testosterone. The potential of corrective surgery and hormone therapy should be well explained to both the patient and her family. The reward may be that she will have partial or almost complete pain relief with retention of fertility.

Some advise that all evidence of endometriosis be removed. Because of the characteristic of endometriosis to form dense, thick, scar tissue with contraction, we make little effort to remove all areas of endometriosis in those patients in whom conservative surgery is planned. Extensive removal may lead to sacrifice of peritoneum and may result in more scarring and tension in the remaining tissue. The result may be a painful, rigid pelvis with persisting dyspareunia. Usually the symptom-producing lesion can be removed without too much damage, and peritonealization can then be adequate. We do not know the relation of endometriosis to sterility, but do recognize that dyspareunia, if relieved, may allow more opportunity for conception. I cannot say if it is significant, but about one-third of our patients have conceived following conservative surgery.

Curative Management

We do not favor x-ray castration. The after-effects of this treatment may be as unpleasant as the condition treated. To cure completely, surgery must be radical. Active, functioning, ovarian tissue is essential to the development of endometriosis. Javert feels that the uterus must be present for endometriosis to thrive. This seems to be true in general, but we have seen exceptions. Endometriosis does, however, seem to thrive if the uterus is present and the ovaries continue to function, and seems, in most cases, to become dormant if the uterus is removed and the ovary spared.

In the younger age group, those who apparently have all the children they desire, we attempt to conserve some ovarian tissue. If involvement is widespread, we do a total hysterectomy and remove the most involved of the two ovaries, and try to resect the endometrioma from the other ovary, thus conserving some ovarian tissue. We spare no effort in our attempt to get good peritonealization and also to keep the conserved ovary well out of the cul-de-sac. In some, the involvement is so widespread that all of the pelvic viscera must

be removed. We feel that extensive endometriosis does not preclude total hysterectomy. With care, a line of cleavage between the rectum and cervix may be located. The cervix may be removed by dissecting through the anterior and posterior fascial spaces, and the hysterectomy accomplished without danger either to the bladder or to the rectum. We feel that it is better to castrate by removing both ovaries in the presence of endometriosis of the bowel. We have had no problem with residual endometriosis in these patients, even though the lesion in the bowel was untreated.

Summary

The diagnosis of endometriosis is confusing. The disease is often not diagnosed or is misdiagnosed. Without physical findings, we should be careful in making a diagnosis. It is true that accuracy in diagnosis can only be obtained by a study of patients on whom surgery has been accomplished. The degree of accuracy will be affected by the cooperation of the pathologist. Biopsies of suspicious lesions may aid in making a diagnosis. Complete section of ovarian cysts should be made, for not all bloody cysts are endometriosis. The history and physical examination are of greatest importance in making a diagnosis. As it is possible that one out of four gynecologic patients may have endometriosis, we should consider it, in every gynecologic consultation. The common symptoms elicited in the history are dysmenorrhea, low abdominal pain, menorrhagia, sacral backache and dyspareunia. The physical findings which point to the diagnosis are tender nodules on the uterosacral ligaments and in the rectovaginal septum, adherent, enlarged ovaries prolapsed into the cul-de-sac, adherent retrodisplacement of the uterus which is frequently painful on motion. All of these findings are exaggerated just before the menstrual period.

Any selected treatment rests on a proper patient-physician relationship. Psychosomatic complaints must be ruled out. The patient must have a thorough explanation of endometriosis, choices of treatment and end results. Management has been discussed from the standpoint of no treatment, palliative treatment, and corrective surgery. If the symptoms are severe, and

particularly if dyspareunia is marked and the couple desire children, some definitive treatment is indicated. We prefer a trial of hormone treatment. Of the hormones, we prefer androgens because ovulation is not usually interrupted and because in 15 patients so treated, who were trying to conceive, conception occurred in 9.

If hormones fail to relieve the symptoms, conservative surgery may be employed. We still feel that suspension of the uterus and ovaries, in these patients in whom pain is a major symptom, aids in relieving the major complaint. At the same time, we remove as much of the endometriosis lesion as is consistent with good peritonealization. One-third of these patients have conceived. Androgen therapy is frequently used postoperatively when some pain remains, and moderate relief has usually followed.

In the older patients and in those to whom childbearing is not an important consideration, if endometriosis is extensive we consider definitive surgery. Generally, we do a total hysterectomy and remove one ovary, leaving the better ovary, and resect all of the endometriosis possible, consistent with good peritonealization. With bowel involvement, we remove both ovaries, and have had no trouble with recurrence of the bowel lesions.

Following surgical menopause, few patients develop severe menopausal symptoms. If they should develop, estrogens may be used. Most agree that there is no danger of reactivating endometriosis by giving estrogens.

We are most concerned with the management of endometriosis. To manage properly, it must be diagnosed. Too often the decision as to management is made in the operating room because the disease was not suspected before surgery. In young women anxious to retain fertility, any choice of treatment at that time is apt to be an unhappy one, for the treatment is either too little or too much and the patient is not prepared for either. The most fortunate are the women in whom surgery is delayed. After examining each gynecological patient, we might well ask the question "Can this be endometriosis?" I consider that palliative treatment with full explanation to every patient is most rewarding.

ELECTIVE PEDIATRIC SURGERY*

HUGH B. LYNN, M.D.**

Louisville

DURING the three years the section of pediatric surgery has been in existence, certain rules or time guides have been established for the care of so-called "elective" surgical procedures.

In dealing with newborn infants it is always well to be mindful of the poorly understood fact that these little patients exhibit amazing vitality and vigor in the first 48 to 72 hours of life. During this period it is now a common thing for infants to withstand prolonged anesthesia and exhausting surgical procedures which they would tolerate poorly (if at all) any time in the ensuing five to six weeks. Following the first six weeks of life the infant once again seems equal to the rigors of extensive surgery and has the additional advantage from the surgical standpoint of having demonstrated his freedom from congenital anomalies incompatible with life and freedom from other more urgent problems—be they surgical or medical. (Figure 1)

VITALITY OF NEWBORN INFANT
(Pediatric Surgeons' Impression)

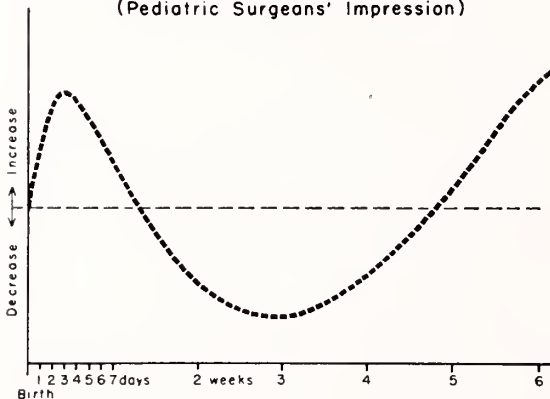


Fig. 1

It is only fair to state that any decision to perform a surgical procedure which is not in itself a life saving measure is tempered with the evaluation of the risk involved. In a University Medical Center Training Program these risks and hazards are (or should be) reduced to a minimum so that what is an every day occurrence on a pediatric surgical service might be

viewed as an unwarranted endangering of a child's life if the same operation were performed in a small community hospital. Many factors contribute to this increased scope and safety of surgery in children.

Trained anesthetists, skilled in the handling of small patients are probably the greatest aid in any pediatric surgical program. The ability of an anesthetist to not only administer a proper anesthetic, but to control parenteral fluid administration, calculate blood loss, anticipate the demands of the operation and in general to direct the entire operating room is invaluable and has undoubtedly been responsible for saving many lives and avoiding many complications.

A competent house staff of conscientious, intelligent doctors, devoted to duty is a blessing both to patient and surgeon. While the actual operating room assistance is of great value, the true worth of the alert house officer is revealed many more times in the pre- and post-operative care which by its quality eliminates the complications and minimizes the morbidity.

Too great stress cannot be placed on the importance of the nursing service. The standards set for the care of children by the trained pediatric nurse and carried out under her direction by all levels of ancillary workers, enable a pediatric surgical service to function smoothly and effectively while having a truly astounding "turn over" of patients. This burden on the nursing service and administration is even more obvious when one realizes that it is our policy to admit all elective surgery in the afternoon, process each patient (history, physical, laboratory tests and x-ray examinations), obtain base line studies of vital signs (T.P.R. every 4 hours) and deliver the patient to the operating room the following morning. In addition to this demand upon hospital personnel, all hernias, circumcisions, cysts of branchial clefts, thyroglossal ducts, etc., are routinely discharged the morning after surgery. Appendectomies, pyloromyotomies, etc., all leave the hospital in three to five days. As a result of this rapid exchange of patients it is possible to care for many more patients than our bed capacity would indicate and consequently the total number of patients cared for in the hospital has climbed remark-

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**Assistant Professor of Surgery and Chief of Section on Pediatric Surgery, University of Louisville Medical School; and Surgeon-in-Chief, Children's Hospital, Louisville, Kentucky.

ably while the length of stay per patient has dropped dramatically. Only exceptionally well run laboratory and x-ray departments can provide such efficient service particularly when one realizes the time consuming techniques required to obtain these studies with minimal emotional upset to both patients and parents.

The presence of an adequate blood bank which can provide large amounts of blood if necessary on short notice is a blessing to any hospital. It is the elective case which develops into a larger scale operation than planned due to some unforeseen development which taxes the blood banking system. At the same time it is the very presence of such a blood banking system which enables a surgical service to function with such a rapid turn over of patients without increased hazard to these very patients.

Inguinal Hernia

It has become our policy to consider these cases as requiring prompt surgery. There would seem to be little place for the use of the truss, even the yarn truss, and we limit its use to hospital patients on the infrequent occasions when other medical disease prohibits immediate surgical correction.

Once the hernia is detected and the family is satisfied it is a real entity, surgery is offered as an immediate procedure. In fact the surgical staff encourages the on-the-spot consultation method, rather than the routine referral to our pediatric surgical clinics.

It should be stated that even prematures with hernias are usually operated upon prior to discharge from the hospital and when there is some question clinically of there being symptoms due to the hernia or some degree of difficulty in reducing it, surgery is offered at almost any weight.

So far as the problem of bilateral hernias is concerned, during the first thirty months of life any male infant with a left inguinal hernia is carefully evaluated and unless there is some medical or anaesthetic contraindication, after repair of the left inguinal hernia, the right canal is explored. The rationale for this routine is the fact that the left testicle descends earlier than the right one, and in cases where nature has failed to obliterate the left processus vaginalis, it seems less likely to have been successful in obliterating the peritoneal communication on the right side in a much shorter period of time.

This has been a most rewarding procedure in our hands and has prevented many subsequent hospitalizations since sixty percent of these cases have shown a definite hernia on the right side at surgery.

It is rare for us to be forced to operate on an incarcerated hernia. When admitted to the service in this state it is very seldom that some member of the staff cannot reduce the hernia after a period of sedation and Trendelenburg position. When an incarceration is reduced, the patient is retained in the hospital and scheduled for operation 48 hours later. This policy has made it possible to perform the surgery after edema has subsided and the patient and his tissues are in better condition.

Undescended Testicle

This condition provides the most controversial of the surgical problems after umbilical hernia and hemangiomas.

There has been more progressive thinking on this subject in recent years and at the present moment the tendency is definitely toward earlier surgical correction.

In cases of bilateral undescended testicles, if accompanied by a Frohlich type of constitutional configuration, the use of anterior pituitary like substance is encouraged for a trial. This is on the basis that hormonal deficiency may have been responsible not only for the constitutional configuration, but also for the actual failure of the testes to descend. By the same reasoning, we do not advocate any trial of hormones when one testicle is normally placed since the same amount of circulating hormone was available to both testes. It is our feeling that most of the reputedly good results in hormonal therapy for unilateral undescended testicles are really cases of "high-riding" testicle with strong cremasteric suspension. It is also our belief that practically all cases of undescended testicles are associated with some degree of inguinal hernia. On this basis it is hard to understand why a child should be subjected to multiple expensive injections when, even if the testicle enlarges and falls lower in the canal or upper scrotum, an operation for correction of the hernia will probably be required.

In view of all this controversy, there has been a very slow response on the part of surgeons to the recent evidence that testicles which remain undescended undergo definite deteriora-

tion which starts sometime after the fifth year. It is our policy to urge surgery before the sixth year of life and our results with operation in infancy have been most satisfactory. The constant criticism of this approach is the firm belief of many doctors that it is impossible to detect the truly undescended testicle in a small infant.

The examination of the small child requires much time and patience. A warm room and adequate time for winning the child's confidence are as important as warm hands. Having observed the ungarbed child casually while distracting him and playing with him, it is then advisable to place the warm fingers high on the abdomen and gently press downward over the internal ring and along the inguinal canal. This may often be the only time in which a gonad will be encountered in this examination. If a mass is palpated, an effort is made to push it beyond the external ring and over the public ramus where it can be grasped in the fingers of the other hand. When this is accomplished, it is our feeling that this is not an undescended testicle and no surgery is indicated. In the event that the gonad comes just to the external ring, the patient is placed in a warm tub for 10 to 15 minutes and actually examined under water to see if relaxation enhances the descent. Not infrequently this test produces a normal testicle in the upper scrotum. The additional value of the warm tub is to make a previously undetected testicle become palpable in the canal. When these two steps have been taken, the child is urged to stand (if able) and to strain and cry. During this exertion a testicle will occasionally appear in the canal but more often only a hernial bulge will be noted.

Having satisfied these three steps, surgery is offered to the parents. Little stress is placed on the terror of increased incidence of malignancy, the emphasis being placed on the more readily detectable tumor in the descended testicle. Also, little emphasis is placed on the operation so far as the future spermatogenesis of that testicle is concerned. We urge the operation on the basis of:

1. Early surgery gives better final anatomical results and is easier as an experience on a preschool child than on a 12 or 14 year old.
2. Psychological aspects—being like the other little boys.
3. To correct hernia and avoid possible incarceration or a complicated emergency procedure.

4. To prevent the increased risk of trauma to a testicle in the canal.

5. To determine if a gonad is actually present.

Umbilical Hernia

This represents the most controversial operation in pediatric surgery. Much has been written and even more spoken about the spontaneous closure of hernias, particularly in the negro race.

It is on the basis of early spontaneous closure that we strap all umbilical defects during the first two and a half to three months of life. We have given up the more elaborate adhesive devices in favor of a two inch strip of "Elastoplast" or Becton-Dickinson #10 "ACE" adhesive which is placed across the abdomen while an assistant invaginates the pouching umbilicus. These strappings have a tendency to stretch or "give" with the abdominal distention of eating and are more resistant to bath water, perspiration and urine. By three months of age it is usually possible to predict whether a fascial defect will or will not close. A thick gristly ring which easily admits an index finger, when associated with a generous subcutaneous pouch, usually indicates some degree of herniation will persist. On the other hand lack of marked pouching and a less thickened ring certainly tends to indicate obliteration will eventually occur. However, it is our policy not to operate during the first six months of life except in rare instances and as a rule the females come to surgery at twelve months of age and the males at eighteen months of age since the males appear to show a greater tendency to obliteration when the infant stands and walks.

Hemangiomas

Obviously there are many who do not consider the treatment of hemangiomas a surgical problem. The port-wine stains are practically never attacked surgically. The umbilicated cavernous or strawberry type of hemangioma has received the most critical inspection in the literature. It is undoubtedly true that a major proportion of these are self-limited and may be safely observed. It is also undoubtedly true that a surgeon is more apt to advise surgery than other methods of therapy, however, it has not been our experience that a surgeon is less

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THE USE OF RADIOACTIVE ISOTOPES IN THE TREATMENT OF CANCER*

WENDELL G. SCOTT, A.B., M.D., D. Sc. (HON. CAUSA) **

St. Louis, Missouri

THE use of radio-active isotopes as therapeutic agents in the treatment of malignant disease depends largely on their suitability as replacements for radiation sources that are not as readily available, as safe, or as inexpensive. The value of these physical agents also depends somewhat on their chemical properties and radiation characteristics. It depends even more on the knowledge and skill of those who apply them. After the administration of a radioactive isotope, there is no antidote. The reactions are non-reversible. In fact, the isotopes can be more hazardous for both the giver and the recipient than those agents that were previously used unless those who employ them are properly trained.

The U. S. Atomic Energy Commission has laid down certain minimum requirements as to personnel, space and equipment which must be fulfilled by those who wish to use radio-active isotopes. The requirements are in the best interest of the patients and are necessary in what is today still largely an experimental field.

The radio-isotopes that are employed in the treatment of cancer fall into two groups. First are those capable of doing a new job which usually depends on a selective physiologic affinity for a specific organ or tissue due to either the physical characteristics or biochemical and pharmacological attributes or to both.

Second are those that can be substituted for agents already in use because they are more

readily available; possess greater versatility; produce less side effects; or, are less hazardous.

In the first group, those with a specific avidity for various organs or tissues, are iodine 131 and phosphorus 32.

In the second group, those which serve as substitutes for external radiation sources, are cobalt 60 and cesium 127 as sources of gamma radiation and strontium 90 for beta radiation. For intracavitary use there are phosphorus 32, chromic phosphate, cobalt 60 and gold 198.

Radioiodine

In the treatment of distant metastases from thyroid carcinoma with radioiodine 131 Beierwaltes reports that over 250 cases have now been handled by this method. In these patients a total thyroidectomy with radical neck dissection is necessary and must result in complete extirpation of all thyroid tissue. If this is uncertain the operation should be followed by deep x-ray therapy. In general, the highly differentiated follicular and alveolar types respond well; the papillary types less so; and the undifferentiated or highly anaplastic types not at all.

Thiouracil may be given for several months after thyroidectomy and is helpful if stopped two days before the administration of the radioactive iodine. Thyroid or iodine medication interfere with the uptake of the radioactive iodine and should not be given before or during the treatment.

The response of the metastases to this form of treatment depends on the uptake of radioiodine by them. This may be determined by:

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willing to observe a lesion than is a pediatrician or dermatologist. The unfortunate part of dealing with capillary hemangiomas is the amazing rapidity of spread after many months of inactivity. For this reason we have little faith in the waiting game when the lesion is in a vital area such as the corner of the eye, mouth, or nasal creases where any enlargement will make the surgical result less satisfactory cosmetically. Except for those cases, every effort is made to

include the surgical removal of the persistent lesion as a part of another surgical procedure such as T & A, circumcision, herniorrhaphy, etc.

In conclusion, the scope of elective pediatric surgery is increasing daily throughout the country as the conditions outlined here are becoming more generally recognized and a greater effort is being made to attain the most ideal facilities.

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**Associate Professor of Clinical Radiology, Washington University School of Medicine.

autoradiography of a biopsy slice; by external counting; by the amount of iodine 131 recovered from the urine, or by the blood level of iodine 131. External counting is the simplest and most frequently employed method and is easily checked by determining the amount of iodine recovered in the urine.

In our practice, radioiodine therapy is reserved for those patients with many and widely disseminated bone metastases. In most instances, these patients are closely followed and the bone metastases can be detected as they occur. When found they can be more easily and economically treated by deep x-ray therapy as practically any area in the skeleton can be adequately irradiated by x-rays. The effectiveness of any radiation treatment depends on delivering the necessary amount of ionizing radiation to the malignant cells and that is all that can be accomplished by the beta particles from the iodine 131 that are taken up by the metastases. Radioiodine is ideal for selected cases, but deep x-ray therapy can handle most of them as well.

Radiophosphorus

Radiophosphorus has been used in clinical studies in the form of 2 inorganic compounds; the soluble sodium phosphate and the insoluble chromic phosphate as a colloidal suspension. Phosphorus 32 has a half-life of 14.3 days and is a source of beta radiation only.

Radioactive phosphorus is effective in the treatment of leukemias because when injected into the circulation it usually enters the erythrocytes and then appears in the plasma. From the plasma it may return to the liver and then be carried to the spleen or other organs where it becomes incorporated into the white blood corpuscles. The phosphate radical may also be deposited from the plasma directly into the skeleton.

In leukemia patients the deposition of radiophosphorus is greatest in those tissues which have a heavy infiltration of leukemic cells, that is, the liver, spleen, kidneys and bone marrow. The phosphorus which is deposited in bone is an end product of phosphorus metabolism and therefore does not appear until a considerable time after ingestion. Thus, the longer the time interval between administration of P 32 and death, the greater is the concentration of P 32 in bone. This explains the erythropoietic de-

pressant effect that frequently follows this form of therapy.

Treatment is aimed at maintaining leukemic patients in a state of well-being. This is maximal when leukocytosis, hepatomegaly, splenomegaly, anemia and lymphadenopathy are minimal. Since this disease is a completely disseminated neoplasm with infiltration of all organs and tissues, total-body irradiation should be administered at such intervals as are necessary to keep the leukemic cell population within optimal limits, that is, below 25,000 per c.mm. and above 10,000 per c.mm.

This can be done by giving fractional doses of P 32. Reinhard gives 0.5 to 2.0 mc. intravenously every third day for the first two weeks. Subsequent treatment is then individualized in accordance with the initial response.

In following the progress of leukemics, Low-Beer points out that the total white blood cell count alone is not reliable as an index of remission and that equal dependence should be placed on erythropoiesis and the number and type of pathological cells appearing in the differential count. When the attempt to bring the total and differential white blood cell count within normal levels involves a simultaneous depression of erythropoiesis, one must be content with achieving a partial remission.

Chronic lymphoid leukemia is frequently characterized by a low total white blood cell count. In such "aleukemic" cases smaller individual doses over a longer period constitute the only safe method of treatment. These cases do not respond as well to radiation treatment and a complete remission is seldom attained.

In patients whose disease is of long duration, the splenic and adenopathic response to radiophosphorus is less satisfactory. It is also known that patients who do not respond satisfactorily to radio-phosphorus treatment may still respond to local or total-body x-ray treatment, and vice-versa. Hepatomegaly and splenomegaly and also lymphadenopathy respond well to x-ray treatment when a satisfactory effect can no longer be achieved with radio-phosphorus.

In general the response of leukemic patients to treatment by radiophosphorus is comparable to that by local and total-body x-ray therapy. Osgood and his hematologic associates have published 10 year results on a series of "leukemics" treated by radiophosphorus and a comparable series treated by x-ray. They found no difference in the clinical response or in the

survival times in the two groups. They emphasize that radiophosphorus and x-ray are not mutually exclusive methods of treatment, but that one should consider all the factors in each case and decide which is more appropriate, x-rays or radiophosphorus, or a combination of both. There is no magic to P 32. It is just one more radiologic tool.

You may ask about the so-called "radio-resistant" cases that no longer respond to radiation therapy. Does this really occur? The best informed do not believe so. Low-Beer answers this question in a few well chosen sentences which I quote, "Whether one considers leukemia as a tumor or a virus disease, development of a "resistance" on the basis of induced metabolic changes of the tumor cells or virus by radiation is as yet unproved. The gradual increase of primitive cells in the bone marrow and peripheral blood, the progressive displacement of erythropoietic and megakaryocytic elements and the natural history of the disease, whether treated or untreated, suggests strongly that an increasing activity of the malignancy, and not "radio-resistance" is responsible for the lessened response to radiation therapy in the later stages of chronic leukemia." Actually this concept applies to all forms of malignant disease that can be treated by irradiation—no one has yet been able to demonstrate the development of induced "radio-resistance" in cells.

Another important use for radiophosphorus is in the treatment of polycythemia vera. It is very effective in this disease as well as convenient for the patient. It is the treatment of choice. Polycythemia is the ideal disorder for P 32 since the end product of phosphorus metabolism is deposited in the bones at the site of the disease.

The treatment consists of a large single dose of 5 to 6 mc. given intravenously followed by a similar dose 6 to 8 weeks later, depending on the hematologic response. The first signs of hematologic response are evident in 4 to 6 weeks. This latent period occurs because the erythrocytes have a life cycle of from 50-110 days. Radiophosphorus apparently affects only the erythroblasts, and the effect is evident only when the erythrocytes which normally would have resulted from these erythroblasts fail to appear. Myelogenous leukemia is a frequent terminal complication in either treated or un-

treated polycythemia vera and is not induced by radiophosphorus therapy.

Phosphorus 32 is also being tried in patients with advanced and wide spread skeletal metastases from carcinoma of the breast. Friedell and Maxfield have described favorable results following intravenous injections of 1.5 mc. to 2.0 mc. per week for 40 or more days with a total dosage of 10 to 20 mcs. They point out that the treatment is rigorous and should be considered only when the tumor is widely disseminated and causes severe bone pain, because of the possibility of inducing hematopoietic depression as manifested by petechiae or hemorrhage. Objective evidence of bone regeneration occurs in not more than 15%. The use of P 32 for this purpose needs further trial before it can be recommended.

Radiocobalt

Among the group of radioisotopes that serve as substitutes for sources of external radiation, is Cobalt 60. It is a metallic element closely related to iron and nickel and is made radioactive by placing it in the neutron flux of a nuclear reactor.

It is a weak beta radiator and emits essentially monochromatic gamma rays with a mean energy of 1.2 Mev. It is the high intensity of gamma ray emission that makes Cobalt 60 a suitable agent for external and interstitial radiation therapy. In comparison with radium its only disadvantage is the shorter half-life of 5.3 years which requires allowance for this decay. The advantages of radio-cobalt are: 1. Low energy beta radiation which can be easily screened. 2. The gamma radiation is almost homogeneous. 3. It decays into a stable solid element without gaseous daughter products. 4. An adequate supply is available from the nuclear reactors. 5. It can be prepared in any shape and form, electro-plated on any material and activated subsequently for clinical use. 6. It is readily soluble and so may be incorporated in thin wall containers for intracavitary use, and 7. It is less expensive.

For interstitial radiation or for implantation as needles radio-cobalt is used as an alloy consisting of 45% cobalt and 55% nickel, called "cobanic." When used as a wire 1.0 mm. wide it can be cut to any desired length. The wire is then enclosed in gold alloy needles which filter out the beta radiation and are used in the same manner as radium. Others prefer cobalt wires

in monel metal and stainless steel tubings. Others have used cobalt as beads or as small seeds inserted in nylon tubing. This tubing can then be sewn into and through malignant tissue and withdrawn through the intact skin when the desired dosage has been delivered. It is this versatility in form that makes radiocobalt attractive for interstitial radiation even though it must be handled with the same precautions as are observed with radium.

Radiocobalt, however, is of even greater value as a radiation source for "super-voltage" therapy in teletherapy units. The kilocurie units containing 1,000 to 1,500 curies of Cobalt 60 give a depth dose equivalent to that produced with x-rays generated at a peak energy of 3,000,000 volts with an output of 33 r per minute at 80 cm. distance. They are surpassed in energy only by that from the particle accelerators. Of great importance is their simplicity and economy of operation, not to mention their easy installation. No heavy electrical lines, no cables, transformers, tubes, vacuum pumps or complicated controls are required. Once in place they are connected to a 110 volt outlet plug and are ready for continuous, uninterrupted and silent operation. The one objection to cobalt radiation is the relatively large penumbra that surrounds each field. In actual practice we have not found it an objectionable factor. Furthermore, the penumbra effect is now minimized by well designed cones and columnating devices.

The treatment advantages offered by cobalt teletherapy are the same as those afforded by the supervoltage machines, namely; increased depth dosage; increased skin tolerance; decreased bone absorption; and increased systemic tolerance.

For these reasons hectacurie sources of 200 to 600 curies are being used in greater numbers and may well replace the conventional 250 KV deep x-ray therapy machine. Most of these units operate at source-skin distances of 35.0 cm. to 50 cm. and then afford a high output, rapid fall-off of depth dose and a smaller penumbra. Bradytherapy cobalt 60 sources are now being tried and will undoubtedly become valuable radiation tools with source-skin distances of 5.0 cm. to 15.0 cm.

Radiocesium

Another isotope will soon be available for the hectacurie and bradytherapy devices. It is cesium 137, a high yield waste fission product

from nuclear reactors. It emits gamma radiation that is equivalent to that of x-rays generated at 700,000 volts. Cesium offers two advantages over cobalt as a substitute for our present deep x-ray therapy machines; first, a longer half-life of 37 years; second, it will be less expensive.

Radiocesium has come to attention only recently when it has been possible to economically separate it from chemical contaminants. The latest information indicates that it will be available in 1957 and the future for it looks promising in spite of the fact that at present relatively large quantities are required with the disadvantages inherent in sources with large areas. This factor may well be overcome by new ideas in which linear or circular radiation sources are used instead of point sources.

Radiogold

Radiogold is being used to combat malignant disease in three different conditions: First, in the control of malignant effusions; second, in the treatment of carcinoma of the prostate and; third, in the irradiation of the parametrium in patients with carcinoma of the cervix. The features that make gold 198 attractive for the treatment of these conditions are: (1) A short half-life of 2.8 days; (2) 90 per cent of the activity is in the form of beta particles and only 10 per cent in gamma rays, and; (3) the particles of gold in the colloidal form are so small that they can enter the lymphatics and are filtered out by the reticulo-endothelial system of the lymph nodes.

The principle indication for radiogold in malignant pleural or peritoneal effusions is the rapid reaccumulation of fluid with subsequent respiratory embarrassment and general discomfort to the patient. The main therapeutic effect is the inhibition of fluid formation which is the result of a surface phenomenon since the range of the beta particle in tissue is 3.8 mm. and the average path under 1.0 mm. The apparent result is a non-specific pleural or peritoneal fibrosis as the injected gold becomes fixed to the serous surfaces. After a week very little radioactivity remains and additional fluid can then be removed.

The technic requires the removal of excess fluid leaving only several hundred cc. The colloidal radiogold in amount of 75 to 100 millicuries is then injected through a protected syringe. The patient is turned from side to side and the head and foot of the bed are alternately

elevated to distribute the gold. About 50 per cent of these patients have definite palliation with cessation of fluid formation. This procedure has also been helpful in the treatment of malignant pericardial effusions. Very few patients experience radiation sickness from this form of therapy.

Radiochromic Phosphate

In passing, it should be mentioned that colloidal radioactive chromic phosphate is also being tried in the control of malignant ascites and pleural effusions. The particles of this suspension are too large to be picked up by the reticuloendothelial system and thus remain in the serous cavities. It has advantages over radiogold for this purpose because it is a pure beta emitter which requires minimal shielding for safe handling and has a half-life of 14.3 days.

Flocks, Kerr and associates reasoned that radiogold would be an excellent material for the treatment of a certain group of patients with carcinoma of the prostate, because it would produce a very intensive irradiation of the tumor tissue without damage to the surrounding normal tissue since 90 per cent of the activity is due to beta particles which have a maximum range in tissue of 3.8 mm. This avoids the high incidence of bladder and rectal radiation difficulties which follow high voltage roentgen or gamma irradiation.

They have treated those cases in which local extension made radical surgery of little avail and distant metastases could not be demonstrated. This was undertaken in an effort to salvage some of those patients who would otherwise be treated only palliatively and symptomatically by the use of hormones, orchiectomy, and limited surgical procedures. Forty to sixty per cent of all cases of carcinoma of the prostate fall in this group.

Their technic consisted in exposing the prostate and the neck of the bladder through a retropubic approach, opening the bladder, and injecting the material under pressure throughout the exposed mass of neoplasm, both from within the bladder and external to it. As much as possible of the carcinomatous tissue in the prostate was removed before the injection as were all grossly involved lymph nodes. Their dosage has been 2 mc. per gram of tissue with an upper limit of 150 mc. Not more than 1 cc. is injected in each position so that all different fascial compartments are covered. They report

clinical arrest of the tumor was obtained in about 1/3 of 130 patients and in some cases complete eradication apparently occurred as biopsies failed to reveal carcinoma. While this procedure is still in the developmental stage, it is slowly gaining wider acceptance.

Allen, Sherman and Arneson concluded that perhaps the best way to improve their results in the treatment of carcinoma of the cervix was to deliver better irradiation to the parametrium and pelvic lymph nodes. They selected colloidal radiogold for this purpose since the 90 per cent of beta radiation means that the majority of the effects will be manifest in the immediate vicinity of the gold and the small particles of gold would enter the lymphatics and be filtered out in the lymph nodes. Actually, the radiogold is found in the same areas as the tumor cells—in the regional lymph nodes including the most inferior and superior external iliac nodes. For example, in early Stage I cases doses of 50 mc. were injected transvaginally into each parametrium. Later each was followed by a pelvic lymphadenectomy and a radical Wertheim hysterectomy. The lymph nodes so obtained showed cytological evidence of profound irradiation and that they had received much more irradiation than is usually achieved by conventional treatment with x-ray and radium. This procedure was used in addition to conventional deep x-ray therapy given through 4 pelvic fields plus radium treatments with a tandem-ovoid type of colpostat.

In this work they found an incidence of presumed positive pelvic nodes prior to treatment of 21.6 per cent in Stage I lesions and of 57.9 per cent in Stage II lesions. The figures fortify their premise that the determining factor in the success or failure of x-ray and radium treatment is the presence of lymph node involvement prior to treatment. Their preliminary figures suggest that this procedure has merit warranting continued explorations.

Keettel and Elkins learned that malignant cells could be recovered from the peritoneal cavities of patients with intact malignant ovarian tumors, and that these dispersed cells probably accounted for the frequent recurrence of the cancer among these patients when treated only by total hysterectomy and ovariectomy. Even when the tumor appeared to be confined to the ovaries, half of the patients died within five years after operation. Keettel and Elkins reasoned that an injection of intraperitoneal

radio-active colloidal gold (Au-198) might eliminate the abnormal cells and improve the survival rate. They developed a technic for this and in patients with Stage I or II ovarian carcinoma perform an abdominal hysterectomy and bilateral salpingo-oophorectomy and inject 150 to 200 mc. of Au-198 intraperitoneally. No additional external radiation is given.

In patients in Stage II as much of the carcinoma is removed as possible and deep roentgen ray therapy is delivered to the pelvis. When possible this is followed by injection of 150 to 200 mc. of gold intraperitoneally.

Patients in Stage IV are divided into those in whom the upper abdominal spread is relatively slight, in which case external radiation and Au-198 are used. Those with extensive spread and pronounced ascites, but in good physical condition, receive only radioactive gold. Patients with extensive carcimonatosis, who are deteriorating rapidly, are best let alone, as even intraperitoneal gold seems to hasten their demise.

The gold is injected into the peritoneal cavity through a No. 13 gauge needle five to ten days after surgery or near the end of external radiation therapy. If ascitic fluid is not noted, 1,000 cc. of normal saline is injected to confirm needle position and to obtain distribution of the gold. If the patient has ascites, no saline is required, but all available fluid is drained before the injection.

The complications are not serious and include transitory nausea and vomiting, abdominal pain, leucopenia and temperature elevation.

Radiostrontium

Radiation of ophthalmic lesions by x-ray results in a greater depth dosage than is desirable. The less penetrating beta radiation is more suitable. This is particularly true in the eye as the lens is highly susceptible to cataract formation. Strontium 90 lends itself readily to this type of therapy. It has a half-life of 19.9 years and emits only beta rays. It is provided in small plaques that can be easily placed directly on the anesthetized cornea in intimate contact with a tumor or vascular lesion. While strontium 90 applicators are the most effective and safe method of irradiating ophthalmic lesions, they cannot be used indiscriminately. Reports are now appearing which indicate that sufficient beta radiation from them can reach the lens and cause the formation of cataracts.

Conclusion

From this brief review of the use of radioactive materials in the treatment of cancer, it is evident that they have a recognized role and that in the future they will occupy an even more important position. At the same time it is obvious that they are only additional radiological tools for the physician to use in the fight against cancer. They do not possess any magic property, but are only another means of delivering ionizing radiation to malignant tissues in more versatile ways.

PIERCING OF EARS

Piercing ears may be done very simply in the following manner. The patient's ear lobe is cleansed with alcohol or some other antiseptic and placed between the points of a previously sterilized towel clip. The towel clip is pressed together, the points going through the lobe and then rocked back and forth making the aperture wide enough so that obturator of ear ring can be passed through lobe easily.

Ear rings are placed in ear lobe perforation at the time of the operation. Each day the obturator is moved back and forth to insure that the aperture is maintained until epithelization takes place.

Every patient is placed on an antibiotic or some form of therapy for a week or ten days to insure against any infection of the ear lobe. Patients are advised not to take ear rings off for three to four weeks.

Alvin C. Poweleit, M.D.
Covington

THE RABIES PROBLEM IN KENTUCKY¹

E. R. RANZENHOFER, M.D.*

and

RONALD L. HECTORNE, D. V. M.

Louisville, Kentucky

Control Measures

BEGINNING in 1949, accurate state-wide reporting of laboratory confirmed cases of rabies in animals was started in Kentucky. The following chart indicates the percentage of infected heads found among the total number submitted since that time.

Year	Positive Heads	Total Heads Submitted	% Positive
1949	574	890	64.5
1950	616	920	67.0
1951	583	1120	52.9
1952	427	873	49.0
1953	475	1091	43.5
1954	328	918	35.7
1955	257	855	30.1

The 1954 Kentucky General Assembly passed the rabies law which makes the State Department of Health responsible for the vaccination of all dogs. In order to immunize as many dogs as possible, all local health departments were requested to establish rabies vaccination clinics in cooperation with their local veterinarians. Since the passage of the law, over 200,000 dogs have been immunized at 4,000 clinics.

The most recent problem which has developed is that of rabies in wildlife, principally in foxes. Even though the number of cases in dogs is being reduced, infection in foxes has been increasing during the past year. Some control measures have been instigated by the State Fish and Wildlife Department in an attempt to reduce the fox population. The following chart indicates the percentage of infected dogs and foxes of the total number of positive cases:

Year	Positive Dogs	Per Cent Positive	Positive Foxes	Per Cent Positive	Total Positive
1949	433	75.4	36	7.6	574
1950	501	81.3	37	6.0	616
1951	434	74.3	41	7.0	583
1952	282	66.0	60	14.1	427
1953	340	71.6	36	7.6	475
1954	261	79.6	24	7.3	328
1955	120	46.7	74	28.8	257

*Epidemic Intelligence Service Officer, Communicable Disease Center, Public Health Service, U. S. Department of Health, Education and Welfare, Atlanta, Georgia, assigned to Kentucky State Department of Health.

¹The Communicable Disease Center, Public Health Service, U. S. Department of Health, Education, and Welfare and the Division of Veterinary Public Health and Preventive Medicine, Kentucky State Department of Health.

In May 1954, the distribution of material for human anti-rabies treatment was started by the vaccine depot in the Division of Preventive Medicine, State Department of Health. Vaccine is forwarded to any county upon request of the local health department. The following chart shows the monthly distribution of vaccine to the counties since this service was started. It should be noted that even though the number of positive cases in animals is decreasing, the number of human treatments is increasing.

	RABIES VACCINE DISTRIBUTION (14 dose treatments)		
	1954	1955	1956
January	...	75	92
February	...	114	132
March	...	188	197
April	...	133 490	219 640
May	99	94	
June	150	73	
July	77	104	
August	110	92	
September	26	116	
October	64	101	
November	75	200	
December	55 656	130 907	
	656	1397	

Indications For Prophylactic Treatment Of Human Rabies and The Complications Of Such Treatment

It has been said that "there is no disease (other than rabies) about which the public is more misinformed. The fears, horrors and superstitions of exposed individuals, magnified by a superabundance of bad advice from well-meaning friends, often produce a state of mental panic before the physician can be reached. Circumstances of exposure so infinitely remote as to make the possibilities of infection ridiculous and unworthy of even momentary consideration often cause extreme mental anguish. Undue apprehension is probably as common a symptom among the many recently exposed persons as it is among the very few who develop the disease clinically. Under such circumstances, the individual is often unable or unwilling to accept medical advice and insists on vaccine treatment, while the physician, too, often fails to maintain a professional equilibrium and allows himself to be influenced by the undue apprehension of the patient."¹

The treatment of persons exposed to rabid animals is dependent upon specific medical indications as well as the physician's judgment in individual cases. It should be recognized that in certain instances the risk of developing rabies is considerably less than the risk of developing serious sequelae to vaccination. "In fact, by the accepted criteria, a large proportion of individuals receiving vaccine have not actually suffered an exposure and should not have received vaccine at all. With the administration of vaccine on this scale, post-vaccinal paralysis is bound to occur and in fact there is reason to believe that there are as many cases of this complication in our country each year as there are cases of rabies."²

Vaccine for human use is commonly prepared from rabbit brain inoculated with rabies virus. Reactions to the vaccine are thought to be caused not by the virus but by sensitivity to the proteins of rabbit brain. These reactions therefore may be more likely to occur in individuals who have received rabies vaccine previously. In cases where sensitivity to the vaccine exists and treatment is definitely indicated, it is suggested that this difficulty may be circumvented by using vaccine made from the brain tissue of another species of animal.

The vaccination reactions may be classified in five groups:

- 1) *Minimal signs* and symptoms are characterized by local swelling and redness at infection sites, hives, rashes, joint swelling, fever, and malaise. Under these circumstances treatment may be continued but under cautious surveillance by a physician.
- 2) *Peripheral neuritis* is not common but can occur any time after the tenth injection in the treatment series. Development of any peripheral neuritis necessitates cessation of treatment.
- 3) Signs and symptoms of *dorso-lumbar myelitis* usually begin after the tenth injection and include fever, gradually increasing weakness, tingling and numbness of the extremities and, eventually paralysis of the extremities. Treatment must be stopped with the onset of any of these symptoms. Death may occur, but complete recovery in several weeks is the usual outcome.
- 4) *Ascending myelitis* presents in a manner similar to dorso-lumbar myelitis. How-

ever, the affection may progress to the cervical segments of the spinal cord with resultant respiratory paralysis. Case fatality rates vary from 30% to 50% and survivors may sustain permanent paralysis.

- 5) *Encephalitis* presents with varying and diffuse signs and symptoms; myelitis may complicate the picture.

Symptoms in the last four categories of reactions do not usually occur until after the tenth injection in the treatment series. Therefore, close observation of the patient is necessary after the tenth injection. Because persons previously vaccinated are probably more predisposed to reactions, they should be treated with a booster course of less than ten injections when therapy is indicated³. These patients must be carefully observed throughout their booster course.

Although paralytic reactions to the vaccine are rare, *treatment deaths are more common than rabies deaths in persons exposed in any manner other than by actual bites of rabid animals.*³ It has been estimated that there are approximately 50,000 vaccine treatments administered in this country every year.⁴ Because post-vaccinal complications are not reportable, an accurate record of their occurrence is not available. However, their incidence is variously estimated as one in 527 treatments by Cook et al,⁵ one in 600 by Pait and Pearson,⁶ one in 2,025 by Applebaum et al,⁷ one in 7,200 by Sellers⁸, and one in 8,500 by McKendrick.⁹ Antirabic treatment is *not* advised under the following circumstances⁸:

- 1) Exposure limited to contact of saliva from the known or suspected rabid animal with the unbroken skin anywhere on the body including the face or mouth.
- 2) Contact by saliva with pre-existent cuts or abrasions which are more than twenty-four hours old or which are protected by a serum scab.
- 3) Wounds inflicted through clothing when the cloth is not torn.
- 4) Exposures limited to handling or petting rabid animals.
- 5) Exposures limited to handling objects contaminated with saliva of rabid animals.
- 6) Exposures limited to drinking the milk of rabid cows or goats.
- 7) When bites or scratches occur one full

INDICATIONS FOR SPECIFIC POST-EXPOSURE TREATMENT

Nature of exposure	Condition of biting animal		Recommended treatment
	At time of exposure	During observation period of 10 days	
I. No lesions ; Indirect contact only	rabid	—	none *
II. Licks :			
(1) unabraded skin	rabid	—	none *
(2) abraded skin and abraded or unabraded mucosa	(a) healthy (b) healthy (c) signs suggestive of rabies (d) rabid, escaped, killed, or unknown	healthy clinical signs of rabies or proven rabid healthy —	none start vaccine at first signs of rabies in animal start vaccine immediately ; stop treatment if animal is normal on 5th day after exposure ** start vaccine immediately
III. Bites :			
(1) simple exposure	(a) healthy (b) healthy (c) signs suggestive of rabies (d) rabid, escaped, killed, or unknown ; or any bite by wolf, jackal, fox, or other wild animal	healthy clinical signs of rabies or proven rabid healthy —	none start vaccine at first signs of rabies in animal start vaccine immediately ; stop treatment if animal is normal on 5th day after exposure ** start vaccine immediately
(2) severe exposure : (multiple ; or face, head, or neck bites)	(a) healthy (b) healthy (c) signs suggestive of rabies (d) rabid, escaped, killed, or unknown. Any bite by wild animal	healthy clinical signs of rabies or proven rabid healthy —	hyperimmune serum immediately ; no vaccine as long as animal remains normal hyperimmune serum immediately ; start vaccine at first sign of rabies hyperimmune serum immediately, followed by vaccine ; vaccine may be stopped if animal is normal on 5th day after exposure hyperimmune serum immediately, followed by vaccine

* Start vaccine immediately in young children and in patients where a reliable history cannot be obtained.

** An alternative treatment would be to give hyperimmune serum and not start vaccine as long as the animal remained normal.

Note : To be effective hyperimmune serum must be given within 72 hours of exposure. Dose: 0.5 ml per kg of body-weight

These indications apply equally well whether or not the biting animal has been previously vaccinated.

week prior to the detection of visible signs of the disease, or when bites are inflicted by animals remaining normal one week after biting.

The known time of exposure and the usually long incubation period in rabies favor prophylaxis with specific antiserum. The theoretical disadvantage to such treatment is that there is no known viremia in the pathogenesis of rabies; antiserum has, in general, been most successful in the treatment of those diseases in which viremia occurs. However, administration of antirabies serum apparently prevents the onset of symptoms during the period between exposure and production of active immunity by the vaccine when the administration of antiserum is followed immediately by the usual fourteen day course of vaccine. The specific antiserum has been shown to be most effective if it is administered within seventy-two hours after exposure. The patient must be tested for sensitivity to the serum before it is administered. Early and thorough irrigation of the bite wound with soap solution has been shown to be important in preventing the disease.

This communication is not intended to dis-

courage treatment when it is indicated, but rather to clarify the indications for treatment and to define the hazards associated with indiscriminate vaccination. The accompanying chart, published by the World Health Organization, is a valuable guide in determining the indications for treatment with human rabies vaccine and antirabies serum.

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CASE DISCUSSIONS



CONGENITAL ABSENCE OF THE VAGINA FROM THE UNIVERSITY OF LOUISVILLE HOSPITALS

Patient Protocol

History

E. L., an 18 year old negro girl, was admitted to the gynecologic service of Louisville General Hospital on April 24, 1956 for the management of congenital absence of the vagina.

The patient had been observed on numerous occasions since 1951. In that year, at the age of 13, she was brought to the urology clinic with complaints of enuresis and dysuria. Attempts to pass a catheter into the bladder at that time resulted in the meeting of an obstruction near or at the region of the vesical neck. No diagnosis of genital abnormality was made at this time. Also in 1951, a psychiatric consultant wrote that this patient was an intellectually defective child with a psychopathic background. She had been reared in a rigid, rejecting foster home situation, and exhibited negativism, explosiveness and impulsivity. A tentative diagnosis of 'mental deficiency-imbecile' was made by the psychiatrist.

In October 1953, the patient was brought to the general medical clinic with the complaint that she had never menstruated. She also exhibited almost constant dribbling of urine during the day. At that time an examiner noted the hymen to be intact, and that there was apparently no depth to the vagina. Examination under anesthesia was performed, and a notation was made that no ovary or uterus could be felt. An attempt was made to dissect a plane between the bladder and the rectum, and the patient was then treated by administration of 1 grain of desiccated thyroid daily.

On March 9, 1954, the vaginal mucosa was described as being thin. The pubic hair and the breasts showed some development, suggesting that an estrogenic stimulus was definitely present. The patient was then not seen until Feb-

ruary, 1956 at which time she had developed sparse growth of pubic hair and had reasonably good breast development. Stilbestrol in 2 mg. daily doses was prescribed at this time. On March 9, 1956, a gynecologic consultant described normal appearing external genitalia with sparse pubic hair and a normal clitoris. The vagina was 2 cm. deep, and had apparently normal rugae. A suspension made from scrapings from the vaginal area showed well cornified cells. At a subsequent clinic visit, the patient's mother was approached on the subject of the performance of an operation for the construction of an artificial vagina, and declared herself to be in favor of such a procedure. On April 6, the patient was seen in clinic complaining of bleeding from the external urethral meatus. On cystoscopy, two ureteral orifices were found to the right and one to the left of the trigonal ridge. There was no bleeding from the bladder or urethra that could be observed at this examination, in spite of the history that was given. On April 18, 1956 the patient was admitted to the urology service for observation because of complaints of enuresis and incontinence, and it was from this admission that she was transferred to the gynecologic service for management of her congenital anomaly.

Physical Findings

The physical findings at the time of transfer to the gynecologic service were those of a fairly well developed young negro woman. The vaginal depth was about 2 cm.; there was no evidence of a cervix or of any opening from which the patient's complaint of bleeding could have originated. At the apex of the vaginal dimple, there was a tiny white line, thought by the examiner to be a remnant of the dissection which had been attempted during the examination under anesthesia in 1953. It was impossible to palpate a uterus or adnexal structures.

Treatment And Course In Hospital

On April 20, 1956, under general anesthesia, examination showed an intact hymeneal ring and a small proximal vagina about 1½ cm. deep. At the apex, the previously observed white line thought to be the remnant of the previous dissection was observed. An incision was made along this line, and the plane thus developed was dissected upwards until the entire potential vaginal space had been lengthened to 5 inches. Oozing at either angle of the most deeply situated part of this dissection was controlled by hot packs. A previously cut split thickness graft taken from the thigh was sutured over a neoprene mold measuring 4 inches in length and 1¼ inches in diameter; into the potential space this was inserted, and the vaginal outlet was sutured with interrupted sutures. A Foley catheter was placed in the bladder.

The patient was then prepared for laparotomy, which was performed through a conservative Pfannenstiel incision. The uterus was found to be present, measuring 4 x 3 x 2½ cm. Small normal fallopian tubes were observed bilaterally, and there were small rudimentary ovaries on either side. The latter were described as infantile in appearance, containing no corpea lutea. On palpation of the uterus in the area of the cervix, it was not possible to identify any tissue at the end of the cervix. A roll of tissue described by the operator as feeling like a hard rubber tube running down to the bladder was palpated; there was no evidence of hematometra. A biopsy of the right ovary was taken, and this was later reported by the pathologist as showing "ovary, primordial follicles only."

On May 21, 1956, the patient was returned to the operating room following self-removal of the mold with loosening of the sutures and a 1 cm. laceration of the distal urethra. This time it was observed that there was a 50 per cent take of the grafted skin. Elsewhere, the potential space that had been dissected contained granulation tissue surfaces. The new vagina easily admitted 2 fingers, and had a depth of approximately 4 inches. A balsa wood mold 3 inches long covered with 2 condoms was put into the vagina and was held in place by two Penrose drains strapped to a T-binder. The Foley catheter was reinserted into the bladder, and the previous thigh graft was regrafted with pinch grafts from the opposite thigh.

Subsequently, the patient recovered satis-

factorily. On June 12, approximately 50 per cent of the vagina was completely epithelialized, and its depth was 3 to 3½ inches. By July 31, 1956 the vagina had a depth of 8 cm. and admitted two fingers with ease. On December 11, 1956 the patient reported that coitus was successful and painless, and a good functional vagina that was completely epithelialized and had a depth of 9 cm. was observed.

Discussion

Douglas M. Haynes, M.D.: Congenital absence of the vagina, seen in approximately 1 out of every 4,000 gynecologic patients, is a distressing congenital anomaly which obviously interferes drastically with the normal life of the patient. Patients exhibiting this syndrome often have associated congenital absence of the uterus, although cases have been reported in which a normal uterus subsequently harbored an intrauterine pregnancy. Ovarian function is usually normal in these patients, so that secondary sex characters are the rule in women with this complaint. Although the diagnosis is sometimes made in infancy and during the prepubertal era, the commonest story is for the patient to be brought to the physician at the age of 13 or 14 by a disturbed mother who asks for an investigation of the reasons for failure of the appearance of the menses. It should be kept in mind that the observation of any congenital absence of the vagina is likely to be associated with other abnormalities of the genito-urinary tract; it has been estimated that such abnormalities are present in about half the cases, and a complete urological study ought to be done in any patient with congenital absence of the vagina. This point is illustrated by the finding in the patient above of a duplication of the ureter on the right side.

Embryologically, the lower one third of the vaginal canal develops from the urogenital sinus, whereas the upper two thirds arise from the caudal portion of the müllerian ducts. This explains the clinical finding that most patients with virtually complete absence of the vagina will present a shallow pouch representing the rudimentary lower one third. This finding is likewise illustrated by the case reported. Occasional patients will have complete absence of the vaginal tube.

A great deal of interest has centered around the problem of surgical construction of an artificial vagina. The indications for this operation

vary from one authority to another. Some insist that no operation should be done unless there is evidence of circulating estrogen, and unless the patient is married or about to be. Others insist that the early construction of an artificial vagina is more likely to be successful than one undertaken later, and the psychological advantage of early construction of a vaginal canal may outweigh the disadvantages. One must always consider the possible psychological trauma to a pre-pubertal girl who is constantly aware of a serious anatomical abnormality.

The history of development of operations for relief of this situation is of great interest. In 1817, Dupuytren reported what is thought to be the first attempt to create an artificial vagina. His operation consisted of simply dissecting a space between the rectum and vagina and inserting tampons to maintain the patency of this canal during the occurrence of epithelization. Although a very similar method is commonly used at the present time, the high incidence of infection and limitations of operative technique greatly limited the usefulness of this original procedure. In 1897, Gersuny described the use of epidermal flaps for lining the newly dissected vagina. This method was disadvantageous because of necrosis of the flaps and marked cicatricial shrinkage of the vagina created in this way. In 1904, Baldwin and Mori suggested the use of a loop of ileum to form a double-barreled vagina by combined abdominal and perineal dissection. This operation had a very high operative mortality, and even if the patients survived, there was rather a regularly encountered dyspareunia owing to stretching of the mesentery of the ileal loop, and an annoying mucous discharge was a constant feature of these patients' subsequent course. Another pioneer in the development of the operation was Mackenrodt, who in 1911 constructed a tunnel similar to that described by Dupuytren into which he transplanted heterologous vaginal mucosa. The obvious disadvantages of this procedure limited its usefulness also.

In 1911, Schubert first described a method using the rectum to line the new vaginal canal. This operation became fairly standard for a number of years, but also presented several disadvantages. Its technical features were quite complicated, and it was often necessary to remove a considerable portion of the coccyx to expose the rectum, thus creating a certain amount of disability. Improper performance of

the operation led to a number of serious fistulae. Schubert's operation often interferes with the action of the external sphincter of the anus. For these reasons, the operation is not very often performed today. In 1921, Graves described an operation involving splitting the labia minora with invagination of the conjoined flaps by means of a mold. In 1927, Frank and Geist made a tubular graft from the inner surface of the thigh with a base near the vulva. Their operation, therefore, continued the tradition of the epidermal flaps of Gersuny which was further developed by Kirschner and Wagner in 1930.

A very popular operation was described by Wharton in 1938. Wharton uses a condom filled with paraffin as a vaginal plug, or a balsa wood mold similarly covered. A similar technique was described by McIndoe in 1938. This operation consists of the use of Thiersch grafts on a balsa wood mold covered with a condom. It was essentially McIndoe's operation which was performed in the case reported above. In 1938, Frank first suggested that a simple intubation of the hymenal region in the pre-pubertal girl with congenital absence of the vagina may have a limited but definite usefulness in invaginating a small space without recourse to any operative procedure. A slight modification of this procedure by Meigs consists of the insertion of a pyrex glass tube held in place by a T binder, followed later by a skin graft to bring the skin of the vulva up to the epithelium-lined pouch formed by this way. The success of this operation is considerably limited.

An interesting observation that has been made in patients operated upon for this condition is the finding that the transplanted skin demonstrates biological responsiveness to estrogen similar to that demonstrated by normal vaginal mucosa. Even when there is failure of the graft to 'take,' the ultimate prognosis may be very good if continued dilation of the dissected space is performed, as epithelialization of the granulation tissue surface tends to occur from below. Although Wharton abandoned his original operation in which no grafting was done in favor of the McIndoe technique, others have suggested that some cases may be done entirely without grafting.

Discussion

Mervel Hanes, M.D.: All writers on the subject agree that urological investigation should be done in all cases of congenital absence of

the vagina, yet very few of the reported patients have been subjected to exploratory laporotomy at the time of the definitive plastic procedure. Some series from large clinics have been reported in which no exploration was undertaken in any patient.

The patient reported above was examined by numerous members of the gynecologic staff at Louisville General Hospital during the hospitalization period preceding the surgical procedure described. Even though several examiners evaluated the patient under anesthesia, the unanimous opinion was that the uterus was absent. As a consequence, several consultants were doubtful regarding the utility of exploratory laporotomy. When that procedure disclosed the presence of a small but normally shaped uterus, the finding was therefore unexpected. Before the antibiotic era the hazards of opening the abdomen even for cursory inspection were probably too great to justify the procedure; however, the present day risk of such explorations is very small, and these patients should have the benefit of as precise an evaluation of their anatomic status as is possible. An occasional normal uterus can be discovered and connected with the artificially constructed vagina. The additional trouble is surely justified by the result.

In Counseller's series reported in 1948, 26

laparotomies were performed. Four of these patients had anatomically normal internal organs, but three had developed hematosalpinx and three showed evidence of endometriosis. There is no unanimity of opinion concerning the age at which plastic procedure should be attempted, but in an effort to avoid complications of the type encountered by Counseller it is probably best to undertake the operation at puberty or shortly thereafter.

The use of a foam rubber mold is a fairly new improvement. The mold should be made somewhat larger than the diameter of the dissected cavity. If the cavity is overdistended, the graft is pressed gently against the prepared surface, and the form will conform to the irregularities of the artificial vagina. The balsa wood form is rigid and uncomfortable, besides lacking these characteristics.

Riva and Harding have described the use of this type of mold, and Counseller has recently utilized such a form.

The use of a split thickness graft is favored by many physicians experienced in this operation because it hastens epithelialization of the lining of the constructed tunnel. If there is failure in grafting, the vagina is allowed to heal by granulation, and nothing but time has been lost.

It is impossible to cure all patients; that would be an achievement surpassing in difficulty even the forecasting of future developments. But seeing that men die before the physician is able to bring his skill to grapple with the case—some owing to the violence of the disease die before they have summoned the doctor, some as soon as he arrives; some live one day, others a little longer—in view of this, an understanding of such diseases is needed. One must know to what extent they exceed the strength of the body and one must have a thorough acquaintance with their future course. In this way one may become a good physician and justly win high fame. In the case of patients who were going to survive, he would be able to safeguard them the better from complications by having a longer time to take precautions. By realizing and announcing beforehand which patients were going to die, he would absolve himself from any blame.

—Hippocrates

SPECIAL ARTICLES

THE UNIVERSITY OF KENTUCKY MEDICAL CENTER APPROACHES REALITY

GAIL RANSELL*

ALMOST three decades of continuous, if at times limited, interest in the development of a medical center at the University of Kentucky are showing results.

A commitment to its establishment has been made by the State of Kentucky and an initial appropriation made by the Legislature. A site has been chosen, plans drawn, and actual



Dr. Chambers

construction is expected to get under way in the summer. Tagged with a cost estimate of \$25,000,-

000, this modern medical center is expected to be in full operation by 1961.

A vision of a State University medical school was seen many years ago through the prophetic eye of the late U of K President Frank L. McVey. Back in the fall of 1928 Dr. McVey called J. S. Chambers, M.D., of the Department of Hygiene and Public Health, into his office and asked that he keep him well informed as to the need of medical education in Kentucky and the possibility of building a University medical school. "The time will come," he said, "when we will need the data. We must be ready."

The persistence of the medical school dream through a quarter of a century beset by weakness of the State's finances, lack of federal aid, the Great Depression years, and World War II, is something of a miracle. Its relegation to obscurity and bold revitalization combine to form a saga of the idealism of a few dedicated supporters.

Once in the early days the school came near to being realized. A prospective donor who was also a wealthy Blue Grass land owner, wanted

to build a complete medical center at the University. But he lost heavily in the financial crash of 1929 and died several months later. All thoughts of immediate construction ended for a time.

The time stretched into years. But the course of Kentucky medical history, which dates from 1799 when the first medical school West of the Alleghenies was formed at the old Transylvania University, was eventually to include a chapter on another first in Lexington.

By action of the Board of Trustees "a College of Medicine was established at the University of Kentucky (on June 1, 1954) and authorized to be started when the General Assembly of the State of Kentucky provides necessary funds." (Quotation from minutes of the Board of Trustees meeting June 1, 1954).

A subsequent resolution was adopted by the Board of Trustees at its meeting on May 28, 1956: "Resolved that there is established within the University of Kentucky a Medical Center, which shall include a College of Medicine, a College of Dentistry, a School of Nursing, and a University Teaching Hospital, and necessary facilities appurtenant thereto . . ."

Once definitely committed, the program began to move rapidly. A site was chosen adjacent to the main University campus from land on the Agricultural Experiment Station farm. The 39-acre area borders Rose and Limestone streets on the West and a farm road leading from the Animal Pathology Building on the East. The plot runs to the intersection of a lane joining this farm road and South Limestone Street (Nicholasville Pike). A huge parking lot, sufficient to accommodate about 3,000 cars at various University functions, is planned for

*Organization Editor



Artist's conception of the University of Kentucky Medical Center. Construction will start this summer on the \$25,000,000 project, to include the medical, dental and nursing schools, a 400-bed teaching hospital and out-patient clinic. All units are expected to be in full operation by 1961.

one part of the plot.

William R. Willard, M.D., then dean of the Upstate Medical Center of the State University of New York at Syracuse, was appointed on July 19, 1956 as dean of the proposed University of Kentucky College of Medicine and vice president for the Medical Center. Dean Willard said he came to Kentucky "because it offers an opportunity given to relatively few, namely to develop a medical center from the beginning."

A graduate of Yale and a former public health specialist, Dean Willard was deputy state health officer in Maryland from 1937 to 1943; member of the U. S. Public Health Service Malaria Control service staff in 1944 and during the next two years was assigned to military government work in the U. S. Army. He served part of that time as acting director of public health and welfare for the U. S. Army Military Government in Korea. He returned to Yale in 1946 as an assistant professor and was assistant dean of the Graduate School of Medicine from 1948 to 1951. He holds a doctor of

public health as well as a medical degree.

Tall, lean, and soft-spoken, the 47-year-old dean is presently engrossed in outlining a program of medical education, while he pores over blueprints and plans for the physical construction of the Medical Center, keeps speaking engagements and confers with members of his staff. Drawings of the medical science building and air views of the University campus adorn the walls of his office in the Medical Center's temporary headquarters in the basement of the University's Fine Arts Building. "The Center can't climb anywhere but upward," he laughs.

The \$25,000,000 estimated cost of the Medical Center will include construction of a six-story medical science building, to be built in shape of a "T" and planned for both horizontal and vertical expansion. It will house the medical, dental and nursing schools, a library, offices, student unit laboratories and individual study cubicles. Also included in the Medical Center's plan is a 400-bed teaching hospital, outpatient clinic, living quarters for ambulatory patients, a power plant and a laundry.

Dean Willard says "the medical science building contract hopefully will be let this spring and the hospital contract some months after that. Work should begin on the science building this summer and on the hospital by March of 1958."

The State budget for 1956-58 includes provisions for starting the construction. The last General Assembly appropriated \$5,000,000 toward the medical science building and it is expected that another appropriation of \$6,000,000 will be made next year. In addition, a grant of \$1,208,992 from the federal government has been accepted by University of Kentucky trustees, to be used in the construction of the medical science building in which research activity will be centered. The Health Research Facilities Act of 1956 appropriated funds to assist in building facilities for medical research and it was upon this basis that the University received the federal grant. Applications have been made for additional grants.

The planning of the University of Kentucky

Medical Center, Dean Willard offers, "is a big task with many facets and with many problems to be solved. It is a part of the total University and its objectives must be consistent with the broader objectives of the University, from whence much of its educational philosophy, methods, and character will be derived." He gives the school's four primary responsibilities as: the transmission of knowledge or teaching, the acquisition of new knowledge through research, the preservation of existing knowledge in libraries and museums, and providing service to the local community, state and nation.

The outline of the educational program to be established at the Medical Center will follow along this pattern:

1. Medical education for the undergraduate medical student, beginning with a class of about 50 and gradually increasing to about 75, recognizing and planning for the probably necessity of increasing this to 100. The first enrollment is expected in the fall of 1959, when the curriculum will be limited to first-year studies. This will be increased to



Air-view of UK campus showing 39-acre plot at right-center on which medical school will be built. Shrub-bordered at North, the plot runs parallel with Rose Street extending to intersection with South Limestone (Nicholasville Pike). The new UK College of Pharmacy building, nearing completion, is located about two blocks from medical school site.

provide for two years of study the following year, and so on until the four year course is established. Most of the students are expected to come from Kentucky, with an average of about ten per cent from out of the State.

2. The development of intern and residency programs for physicians and postgraduate programs for all kinds of health personnel, physicians, nurses and others.



Dean Willard says that he is the only medical school dean in the United States who presides over a cornfield. This is the cornfield site of the new school.

3. Educational programs for associated personnel, to include professional and technical personnel in the health fields, schools of Nursing and Dentistry.

Under the Medical Center program, research in the basic and applied medical sciences and in the administration of health services will be given attention. Special studies are being planned to define the health needs of Kentucky, barriers that interfere with proper medical service, and factors influencing the location in which physicians settle and practice. Attention will be focused on problems of the rural areas and provision will be made for consultation and other services to hospitals, welfare and health agencies throughout Kentucky.

"There is a real ferment in medical education today," said the UK dean, "stimulated in part by the dramatic advances in medical science and by a new knowledge of human behavior. This knowledge provides new material for the curriculum and offers the potentiality of improved teaching methods. In planning a new program of medical education it is essential to be aware of this ferment."

"Key elements in our program are the student, the teacher, and the patient. Laboratories, classrooms, teaching hospital and clinic, and the

student dormitories are only tools to facilitate the progress of education."

In selecting students at the new school, emphasis will be placed upon character, personality and motivation for human service, he said. Intellectual ability will not be considered sufficient in itself. He also believes it is important in selecting students to consider those who are likely to remain in the State and serve in the small town and rural areas.

He would select teachers who have a primary interest in students and teaching, and qualities of mind and character which students should emulate.

In accepting patients for the University Hospital and Outpatient Clinic, he advances an admission policy to exemplify the broad range of diseases, differing economic and social levels, and care and concern for the individual rather than a collection of pathological processes.

"We plan no revolutionary methods of instruction in the new school," advised Dean Willard. "Our teaching will be adapted to the needs of Kentucky. The school is intended to fill the State's need for doctors and we will teach with that thought uppermost in our minds."

The educational program will include the traditional medical sciences, i.e., anatomy, physiology, biochemistry, pathology, microbiology, and pharmacology as well as the traditional clinical sciences, e.g., obstetrics and gynecology, pediatrics, psychiatry, medicine, and surgery.

In addition to these, important new elements will be represented: behavioral sciences, to help the physician better understand the patient as a person; administrative medicine, or a study of the demands of society and methods by which personal health services may be made available to the people; comprehensive medicine, to include preventive medicine, diagnosis and treatment and rehabilitation of the disabled, with an emphasis on continuity of care through periods of health as well as illness.

Individualized instruction will be given through small group teaching and unit laboratories. Early contact with patients is advocated, preferably in the first year. Audiovisual aids will be used to supplement the teaching program.

The dean's outline calls for evaluation of the student's work by the faculty, with a restriction

placed on too many formal examinations—this de-emphasis on examinations to be balanced by evaluating performance in the laboratory, special projects, work with patients, and in writing their records. "The pattern of passing has changed from the early days," he said. "We should graduate from 68 to 70 out of a class of 75 students starting in 1959."

In addition to education, the Center will provide medical and dental care for thousands of Kentuckians, many of them indigent patients.

After the program is in full operation, the dean expects that each year should find about 300 students working for the degree of doctor of medicine, about 150 physicians in post-graduate training as interns, residents and clinical fellows being qualified for the practice

of general medicine and its various specialties, 200 dental students, 30 graduate students in basic medical sciences, 500 or more practicing physicians on refresher courses, 200 to 300 nursing students, and 100 or more students training for other technical or professional occupations in the health field.

Now aiding Dean Willard in his planning program are Richardson Noback, M.D., assistant dean and associate professor of medicine, Robert Straus, Ph.D., professor of medical sociology, Howard Bost, Ph.D., professor of medical and hospital economics, Alan Ross, medical statistician, all from Syracuse, and Richard Wittrup, assistant professor of hospital administration, former assistant administrator of the University of Chicago hospital.

(Continued on Page 285)



Dean Willard (seated at right) reviews plans of the Medical Center with members of his staff: (seated) Robert Straus and Richard Wittrup, (standing) Howard Bost and Alan Ross. The assistant dean, Richardson Noback, M.D., was out of town when this picture was made.



EDITORIALS



OPPORTUNITY KNOCKS FOR IMPROVED MEDICAL FACILITIES

THE main purpose of being a County or State Medical Association is to serve the membership and patients of the membership. One of the ways that the KSMA has sought to serve both physicians and the people of Kentucky is through better distribution of medical care, thus providing for the medical needs of all Kentucky citizens.

It was with this in mind that the Association, some ten years ago, led in the development of the Rural Kentucky Medical Scholarship Fund. The purpose of the Fund is to loan money to worthy medical students who are willing to practice in the rural areas of the state where they are needed the most. Despite the increasing cost of medical care and the need for satisfying the demands of the military by providing more physicians, the Fund has helped and is helping a total of one hundred young people, without regard to sex or color, to receive a medical education.

Medical distribution is one problem. Another area of need is to improve medical facilities. Many physicians in Kentucky are anxious to obtain more equipment, rebuild, expand their facilities, or remodel. This costs money. With current Federal fiscal policies as they are, it is difficult to obtain loans. Even where loans for rebuilding, etc., can be obtained, it is not enough to meet the entire cost. As a result, nothing is done and inadequate facilities remain despite the desire to render better medical service.

As a service to our membership, we wish to call your attention to a relatively new program. It is possible for those physicians who plan to build, expand or remodel to obtain the necessary financial aid. How many doctors have heard of the Sears-Roebuck Foundation's Plan of Financial Assistance, in which the AMA co-

operates? This plan is set up to make ten-year loans requiring no security other than the physician's promise to repay. These loans are designed to make up the difference between what can be borrowed locally and what is needed to complete the physician's plans.

An interesting feature of this plan is that the repayment schedule does not require principal payments until the start of the fourth year. Once principal payments begin, interest stops. In the fifth through the tenth year pledge payments exist but are applicable only so long as the loan has not been paid. As a result of this schedule, the rate of interest for the ten years (including pledge payments) ranges from zero to 6 per cent, depending on the rapidity of repayment. Hence, if one started to pay on the principal immediately and paid the note off prior to the start of the fifth year, there would be no interest. If one took the entire ten years and followed the payment schedule, the interest with pledge payments included is only 6 per cent. Any unsecured loan that is at a maximum of only 6 per cent is worth looking into.

Our state is basically meeting the medical needs of the people but there is always room for improvement. Some medical facilities can be improved and the need to improve medical distribution is still with us. If a young physician in Kentucky is planning to build, remodel, expand or purchase additional equipment in rural, small town or suburban areas and can't obtain the necessary financing to complete the job, he should investigate the Sears assistance plan. Also, residents and interns who are graduating in June and are wondering where they will get funds to establish themselves in private practice, should either visit, write or call the Headquarters Office of the KSMA, 620 South Third St., Louisville, for further information regarding this plan and to obtain an application form.

This should provide an opportunity for

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

young Kentucky physicians going into practice and others who wish to expand their facilities for improving medical care that will be most attractive. Certainly this program, operated under AMA supervision, has the hearty en-

dorsement of the KSMA Physicians Placement Committee. It should mean much to the improvement of medical care in Kentucky.

Delmas M. Clardy, M.D., Chairman
KSMA Physicians Placement Committee

VIRAL HEPATITIS

DESPITE a vast experience with viral hepatitis during the World War II and Korean War and since, our actual knowledge of this disease is meagre. In October 1956, there gathered at Ford Hospital in Detroit, sponsored by that institution, a group of clinical, laboratory and research experts from all over the world to discuss and summarize if possible what positive information is held on the subject.

Hepatitis Virus A is the designation of the transmitting agent of the ordinary, most common form of the disease, while Hepatitis Virus B is reserved for the agent causing homologous serum jaundice of serum hepatitis. A great variety of processes has been used, none entirely successful, in an effort to render blood or pooled serum used for transfusions free of this virus. These include ultra violet, ionized, or gamma radiation of the serum, combined thermal and ionizing radiation, chemical sterilization and combined physical and chemical sterilization.

In epidemic viral hepatitis fecal contamination has been found to be the most frequent means of transmission.

Since the power of cell regeneration in the liver is very great, the majority of liver cells damaged by hepatitis completely recover, with restoration of perfect function and little residual scarring, fibrosis or connective tissue. Recovery from the disease seems to confer a reasonable degree of immunity to the particular virus concerned. Virus A Hepatitis is believed, however, to confer no immunity to Virus B invasion and visa versa. Use of gamma globulin has been shown to be moderately effective as a preventive measure, tending, at least, to lighten the severity of the illness.

Of laboratory tests useful in diagnosis and evaluation of progress, the cephalin and other flocculation methods are nonspecific but exceedingly helpful. Bromsulphalein (BSP) retention measures the capacity of the liver for excretion and actually indicates to some degree

the amount of parenchymal cell damage. The takata and transaminase tests measure liver injury and seem especially helpful in the prodromal or early stages of hepatitis. Needle biopsy affords significant and characteristic evidence regarding the stage of degeneration or repair at any period of the disease.

Clinical characteristics of viral hepatitis are those with which we have become familiar in "catarrhal" or infectious jaundice. The prodromal phase, characterized usually by malaise, anorexia, low grade fever, nausea, enlarged and tender liver, may last two or three days or even as long as two weeks. Digestive disturbances—gas, abdominal cramping, diarrhea, usually vomiting—are expected to precede the jaundice which is most often the event clearly indicating the nature of the illness. Hepatitis without clinical jaundice may occur but a slight elevation of serum bilirubin or icteric index is to be expected.

Treatment is now fairly well standardized. Bed rest is imperative during the acute phase, with a low protein low fat diet, high in carbohydrate. A high caloric diet with abundance of protein and carbohydrate but low in fat during the less acute or healing stage is indicated. Some of the newer antibiotics seem to have been helpful in the acute stage. Cortisone, especially in severe fulminating cases, may be used profitably. Vitamin K is often indicated.

After passage of the acute period bed rest may be modified to activity, (toilet and walking about the room) governed largely by the patient's feeling and by laboratory tests. He should not be active to the point of fatigue. Enlargement or tenderness of the liver indicates too much activity. Cephalin flocculation may remain positive long after clinical recovery but should be used as a rough guide as to the amount of physical exercise allowed. BSP retention of 14% or less may be more or less disregarded. The very prolonged periods of inactivity required 10 years ago are now not thought necessary.

Sam A. Overstreet, M.D.



ORGANIZATION SECTION



OFFICERS CONFERENCE PRESENTS DIVERSIFIED PROGRAM BY TOP FLIGHT TALENT APRIL 4

Senator Morton to be Heard at Lexington Session

Among highly-significant features of the timely program arranged for the Seventh Annual County Society Officers Conference at Lexington on April 4, are an address by U. S. Senator Thruston B. Morton, discussions by distinguished AMA representatives, and a look at state medical news by the president of the Kentucky Press Association.

This announcement comes from KSMA President Richard R. Slucher. Dr. Slucher says, "The impressive Conference schedule offers, in addition to topics of state and national interest, the opportunity for society members to hear KSMA leaders tell of vital legislative matters and to learn of recent developments of the Kentucky Physicians Mutual through a discussion by a well-informed panel."

All county medical society officers and committee-men, KSMA officers, committee chairmen, councilors and board members of the Woman's Auxiliary to KSMA, says Dr. Slucher, are expected to attend the day-long Lexington meeting, and that a cordial invitation is extended to all KSMA members to be present.

"What the Medical Profession May Expect of the Eighty-Fifth Congress," is the interest-charged subject of Senator Morton. Recently elected to the Senate from the Blue Grass State, this former presi-

dent of the Ballard and Ballard Company in Louisville was previously elected for three terms to the Congress as a representative from the Third District, in 1946, 1948 and 1950. He served as Assistant Secretary of State from 1953 to 1956, and presently holds the rank of Commander in the U. S. Naval Reserve.

A. S. Wathen, Jr., Kentucky Press Association head and editor of the Kentucky Standard at Bardstown, will look at the content of medical society news from an editor's viewpoint. Young Mr. Wathen is a graduate of the University of Kentucky School of Journalism. He joined the family publishing partnership upon his discharge from active duty in the U. S. Navy during World War II.

John W. Castellucci, Chicago, director of the Blue Shield Commission, will tell the "History of the Blue Shield Nationally," in getting the panel discussion under way at the afternoon session. A graduate of the Detroit College of Law, Mr. Castellucci helped formulate the "Michigan Plan," for veterans hometown medical care.

Other panel members include Oscar O. Miller, M.D., co-founder of the Kentucky Physicians Mutual and one of its directors, D. Lane Tynes, executive director of the Ky. Blue Shield Plan, and Don Giffen, assistant director, all of Louisville. They will tell of the history and recent developments of the Ky. Physicians Mutual and give pertinent information relating to the Medicare Program.



Senator Morton



Mr. Wathen



Mr. Castellucci



Dr. Miller

PROGRAM

SEVENTH ANNUAL COUNTY SOCIETY OFFICERS CONFERENCE

Phoenix Hotel

Thursday, April 4, 1957

9:00 a.m. Registration
Coffee Call (Fireside Room)

MORNING SESSION

Fireside Room

Richard R. Slucher, M.D., presiding

President, Kentucky State Medical Association

- 9:45 a.m. Call to Order
Dr. Slucher
Invocation,
Rabbi Joseph R. Rosenbloom, Lexington
Welcome, A. B. Barrett, M.D., Lexington, President Fayette County Medical Society
- 9:55 a.m. "Medical Legislation, Every Physician's Business," C. Joseph Stetler, Chicago, Director Law Department, American Medical Association
- 10:15 a.m. "Science Fairs and the County Society," Ralph C. Eades, M.D., Valparaiso, Ind.
- 10:50 a.m. "Medicine and Labor-Management Health Plans," L. W. Larson, M.D., Bismarck, N. D., Member Board of Trustees of the AMA
- 11:10 a.m. Intermission
- 11:15 a.m. "The Press and Local Medical News," A. S. Wathen, Jr., Bardstown, Editor, Kentucky Standard and President of the Kentucky Press Association
- 11:35 a.m. Panel: "What's Your Question, Doctor?" Clyde C. Sparks, M.D., Speaker, KSMA House of Delegates, Moderator

LUNCHEON SESSION

- 12:15 a.m. Richard R. Slucher, M.D., Presiding
P.D.R. Number Three
- 1:00 p.m. "What the Medical Profession May Expect of the Eighty-Fifth Congress," The Honorable Thruston B. Morton, U. S. Senator from Kentucky

AFTERNOON SESSION

P.R.D. Number Three

Edward B. Mersch, M.D., Covington, presiding

President-Elect, Kentucky State Medical Association

- 1:40 p.m. "Your Kentucky Blue Shield Plan," Panel—Moderated by J. Duffy Hancock, M.D., Louisville, President of the Kentucky Physicians Mutual and Past President of the KSMA

PANEL MEMBERS:

John W. Castellucci, Chicago, Director of the Blue Shield Commission.

Topic—"History of the Blue Shield Nationally"

Oscar O. Miller, M.D., Louisville, Member of Board of Directors and Co-Founder of the Kentucky Physicians Mutual.

Topic—"History of the Kentucky Physicians Mutual"

D. Lane Tynes, Louisville, Executive Director, Kentucky Blue Shield Plan.

Topic—"Recent Developments of the Kentucky Physicians Mutual"

Don Giffen, Louisville, Assistant Director, Kentucky Blue Shield Plan.

Topic—"Medical Care Program for Military Dependents"

2:40 p.m. Question and Answer Period

3:00 p.m. Adjournment

KSMA Urges Salk Vaccine Use by all Kentuckians

A public information campaign by the Kentucky State Medical Association to alert all Kentuckians to the importance of early vaccination against poliomyelitis will begin March 14 under sponsorship of the KSMA Advisory Committee on Public Health, according to an announcement by C. C. Howard, M.D., Glasgow, committee chairman.

The "Polio Alert" reflects the profession's concern about the large number of persons, especially those under 40, which has failed to avail itself of the protection against paralytic polio afforded by the Salk vaccine. The campaign is part of a nation-wide educational effort by the medical profession which was launched at a meeting sponsored by the American Medical Association, January 26. All state medical societies were represented at the January session.

"The County medical societies will have the major responsibility for seeing that people in Kentucky be informed that the vaccine is safe, effective and available," Dr. Howard said. "As they develop their own local efforts to acquaint every individual of his responsibility to have at least two injections of the vaccine before the oncoming polio season, it is hoped that the long proven immunizations against typhoid, diphtheria, whooping cough and tetanus will also be encouraged."

Letters are being sent to numerous lay organizations at the state and district level by the KSMA urging them to acquaint their own memberships with the facts about infantile paralysis and the Salk vaccine. These point up the importance of the Salk vaccine for all people, but especially those under 40.

Salk vaccine purchased with federal funds is available for persons under 20 years of age and for pregnant women. Commercially supplied vaccine is abundant to meet the demands of all for vaccination.

KSMA Field Secretary Accepts Position with AMA

John Guy Miller, who has served as field secretary for the KSMA for the past five years, has accepted a position in the headquarters office of the American Medical Association, Chicago, effective April 1.

Mr. Miller will be assigned to the AMA's Council on Medical Service. This Council devotes much of its effort to studying social and economic changes, conducting surveys to determine factual data and opinions, which it makes available to the medical profession and the public, according to KSMA Executive Secretary J. P. Sanford.

Some of the high points of Mr. Miller's accomplishments with the KSMA include his work on the comprehensive study of indigent medical care in this state, which was done under the supervision of the KSMA Committee on Medical Education and Economics, formerly known as the Committee on Medical Service. As secretary to the public Health Committee, he handled the promotion of Immunization Week and as secretary to the Diabetic Detection Committee,

handled the Diabetic Detection Drive.

His most outstanding accomplishment, many observers think, was in the field of Rural Health. In this connection he worked with the chairmen of professional groups and promoted the Twelfth National Conference on Rural Health, held in Louisville this month. Another of his public service contributions includes work with the Kentucky Physicians Placement Service and the Rural Kentucky Medical Scholarship Fund.

"While Mr. Miller will be sorely missed at the KSMA headquarters office and throughout the State, we are all delighted to see his good work nationally recognized," the Executive Secretary said. No replacement has been obtained.

Ky. Surgical Society Will Meet at Lexington May 17-18

"The Spleen, Some of Its Diseases that May be Treated by Surgery," will be discussed by Frederick Amasa Collier, M.D., University of Michigan, guest speaker at the 1957 meeting of the Kentucky Surgical Society in Lexington on May 17-18.

A full program of the surgical society conference will be carried in *The Journal* in the April issue. Tentative plans include the presentation of five scientific papers each morning, leaving the afternoons free for recreation. The meeting, which will be held at the Campbell House, will close with a banquet on Saturday night.

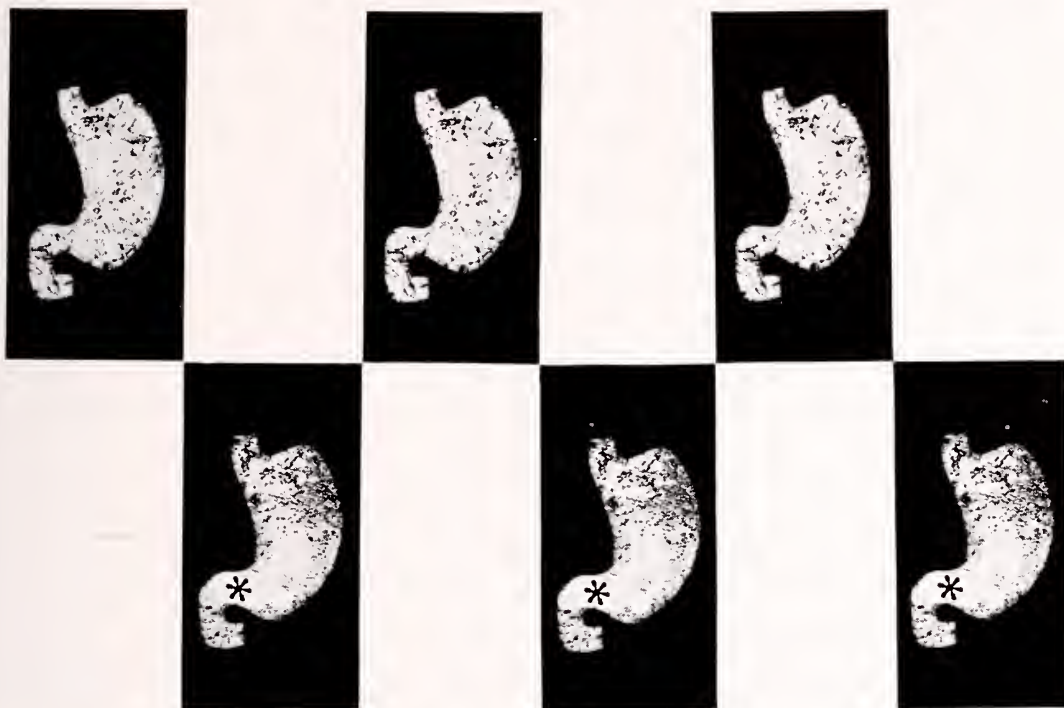
Dr. Collier was graduated from Harvard Medical School in 1912. He served an internship and a residency at Massachusetts General Hospital and was assigned to overseas duty with the U. S. Army in World War I. He has been chairman of the Department of Surgery at the University of Michigan since 1930.

Medicare Regulation is Changed

The attention of physicians participating in the "Medicare Program" is called to the following, which appeared in the February 15 issue of the AMA Washington News Letter:

"Defense Department announces a change in regulations that will eliminate some paperwork for physicians under the dependent medical care program. When the patient was treated on an outpatient basis for injuries under the old system, the doctor would collect the first \$15 from the patient, apply it to his bill, then submit the remainder of his bill jointly with the hospital or lab bill for payment by the government.

"In the future if the doctor's fee exceeds the \$15 he will submit the remainder of his bill separately, and the hospital or lab will submit its bill separately."



Pro-Banthine® Inhibits Excess Parasympathetic Stimuli in Peptic Ulcer

Medical literature now contains more than 500 references to the beneficial role of Pro-Banthine Bromide (brand of propantheline bromide) and Banthine® Bromide (brand of methantheline bromide) as evidenced by a marked healing response of peptic ulcers. Rapid symptomatic improvement, particularly with reference to pain relief, is followed by roentgenographic demonstration of crater filling.

The therapeutic action of Pro-Banthine in

decreasing hypermotility and hyperacidity, together with the remarkable early subjective benefit, is a desired approach in the management of ulcers.

The initial suggested dosage is one tablet, 15 mg., with meals and two tablets at bedtime. An increased dosage may be necessary for severe manifestations and then two or more tablets four times a day may be indicated. G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

SEARLE

KAGP Announces April 23-26 Assembly Program

The Kentucky Academy of General Practice will hold its Sixth Annual Scientific Assembly at the Brown Hotel in Louisville, April 23-26, according to Carroll L. Witten, M.D., Louisville, chairman of the Committee on Arrangements.

Registration will be conducted for members, wives, guests and exhibitors on the mezzanine at 7:30 a.m. Wednesday, April 24, and at 8:00 a.m. on Thursday and Friday, April 25-26. A board of directors meeting will be held at 6:00 p.m. in the Derby Room on April 23, and a board of directors dinner in the Roof Garden on April 24. A recess will be called each morning and afternoon to allow those in attendance to visit the exhibits.

The general outline of the scientific program is as follows:

Wednesday, April 24

Crystal Ballroom

JULIAN B. COLE, M.D., Presiding

President, Kentucky Academy of General Practice

9:45 a.m.—"Recent Advances in Atherosclerosis,"
LOUIS N. KATZ, M.D., Chicago, Ill.

10:15 a.m.—"Allergy in the Connective Tissue Diseases,"
FAY B. MURPHEY, M.D., Chattanooga, Tennessee

10:45 a.m.—"Management of Angina Pectoris,"
A. CARLTON ERNSTENE, M.D.,
Cleveland, Ohio

2:30 p.m.—"Emergencies in the Newborn,"
JOHN L. REICHERT, M.D., Chicago, Illinois

3:00 p.m.—"Anxiety Reactions in Office Practice,"
HENRY H. DIXON, M.D., Portland, Oregon

3:30 p.m.—"Thyroiditis and Myxedema,"
BEVERLY T. TOWERY, M.D., Louisville

7:00 p.m.—Annual General Assembly,
Roof Garden

Thursday, April 25

Crystal Ballroom

W. E. BECKNELL, M.D., Presiding

President-Elect, KAGP

9:00 a.m.—"Urological Emergencies in Practice,"
J. ANDREW BOWEN, M.D., Louisville

9:30 a.m.—"Ascariasis as a Surgical Complication,"
JOHN B. FLOYD, JR., M.D., Lexington

10:00 a.m.—"Aneurysms and Occlusive Diseases of the
Aorta,"
J. HERMAN MAHAFFEY, M.D.,
Louisville

11:00 a.m.—Round Table on "The Acute Abdomen,"
J. ANDREW BOWEN, M.D., JOHN B.
FLOYD, M.D. and J. HERMAN
MAHAFFEY, M.D.

2:00 p.m.—"Cervical Biopsy before Treatment,"
GEORGE S. ALLEN, M.D. and MAL-
COLM BARNES, M.D., Louisville

2:30 p.m.—"Management of Leukorrheas,"
LESLIE V. DILL, M.D., Washington,
D.C.

3:00 p.m.—"Some Current Concepts on Vaginitis,"
HERMAN L. GARDNER, M.D., Hous-
ton, Texas

4:00 p.m.—Round Table on Office Gynecology,
W. O. JOHNSON, M.D., Moderator,
GEORGE S. ALLEN, M.D., LES-
LIE V. DILL, M.D., HERMAN L.
GARDNER, M.D., MALCOLM
BARNES, M.D.

6:30 p.m.—Annual Banquet
Crystal Ballroom
Speaker: MALCOM E. PHELPS, M.D.,
El Reno, Oklahoma, President, Ameri-
can Academy of General Practice

Friday, April 26

Crystal Ballroom

New President-Elect, Presiding

9:00 a.m.—"C.R.P.A. and Transaminase,"
HENRY POST, M.D., Louisville

9:30 a.m.—"Atherosclerosis and the Fat of Milk,"
JOHN J. MILLER, M.D., Chicago
Illinois

10:00 a.m.—"Problems of Infertility,"
ROBERT B. GREENBLATT, M.D.,
Augusta, Georgia

11:30 a.m.—Board of Directors Meeting
Derby Room
(All KAGP Members invited)

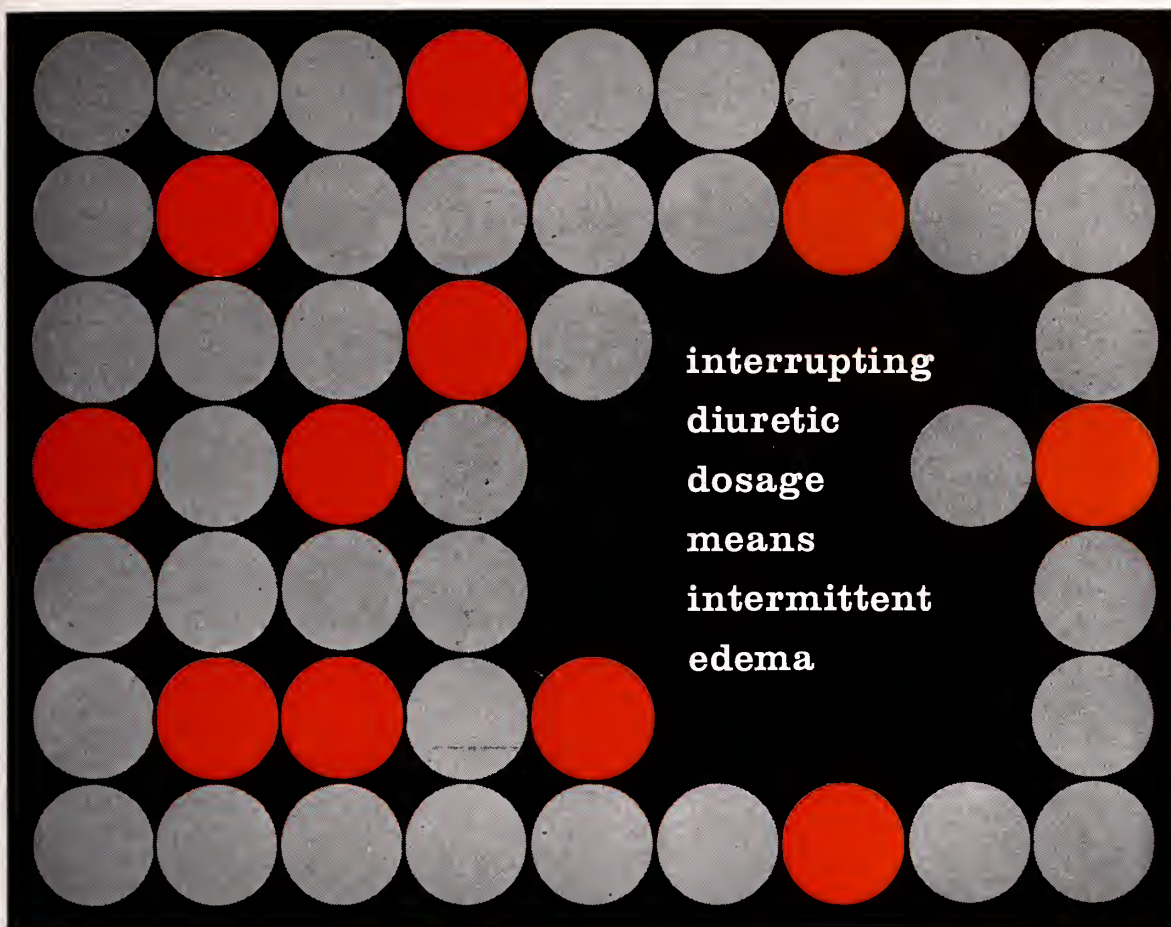
12:00 Noon—Scientific Session and Exhibits Close

McCracken Medical Society Honors Dr. Jackson

Elbert W. Jackson, M.D., Paducah, KSMA Presi-
dent in 1946, was the recipient of an honor plaque
from the McCracken County Medical Society on
February 27.

Dr. Jackson was commended for his contribution
to Riverside Hospital, Paducah, which he helped
to establish, and to the medical profession in general.
The presentation was made by Leon Higdon, M.D.,
Paducah.

A native of Hickman County, Dr. Jackson gradu-
ated first in a class of 106 students from the Uni-
versity of Louisville Medical School in 1912. He is a
past president of the Kentucky Surgical Society, the
McCracken County Medical Society, and the South-
east Kentucky Medical Society. He received the
KSMA Distinguished Service award in 1954.



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1957 Annual Meeting

Kentucky State Medical Association

Columbia Auditorium

Louisville, Kentucky

September 17, 18, 19

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EVERETT L. PIRKEY, M.D., Chairman

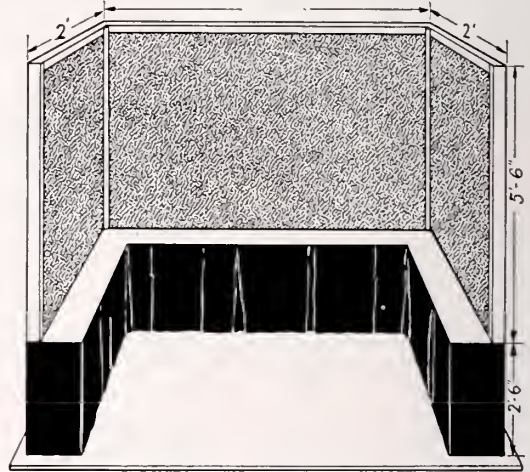
Committee on Scientific Exhibits

Louisville General Hospital,

Louisville 2, Kentucky

(Applications for space should be received
before July 1, 1957)

Dimensions and structure of K.S.M.A. Scientific
booth are shown in accompanying illustration



1. Title of Exhibit:
2. Description or nature of exhibit: (Attach brief description to this blank).
3. Will you require shelf space?
4. Give approximate amount of wall space needed. (Included in total space is two side walls of
two feet in length)
5. Name of institution co-operating in the exhibit (if desired)
6. Name of exhibitor:
- (Street & No.) (City)

The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.

The C-J, Times Foundation Contributes to RKMSF

The Courier-Journal and Louisville Times Foundation has just made its fourth contribution to the Rural Kentucky Medical Scholarship Fund, according to C. C. Howard, M.D., Glasgow, chairman of the Fund's board of trustees. The \$3200 gift total provides for a full four-year medical scholarship.

Dr. Howard expressed deep appreciation for the very substantial interest shown by the Foundation in the program for better distribution of medical care. He said that Tarleton Collier, Courier-Journal editorial writer, is a member of the Rural Kentucky Medical Scholarship Fund's board of trustees.

The Foundation was established in 1951 and has operated continuously from contributions of The Courier-Journal and Louisville Times Company, WHAS Incorporated, and the Standard Gravure Corporation. Religious, educational, scientific, emergency welfare and other worthy interests are beneficiaries of the Foundation. Members of its board of trustees are Barry Bingham, chairman, Mrs. Barry Bingham, Mark Ethridge, Lisle Baker and Wilson W. Wyatt.

14th Councilor District will Meet at Pikeville April 10

The Fourteenth Councilor District will meet at the Pikeville Country Club on Wednesday, April 10, according to Charles C. Rutledge, M.D., Hazard, district councilor.

Scientific papers to be presented at the afternoon program, beginning at three o'clock, include "Treatment of Acute Chest Injuries," by Rudolph Noer, M.D., "Acute Thyroiditis," Beverly Towery, M.D., and "Prophylaxis and Treatment of Rheumatic Fever," W. C. Adams, M.D. All the essayists are from the University of Louisville School of Medicine.

The scientific program will be followed by a social hour and a dinner. KSMA President Richard R. Slucher, M.D., the after-dinner speaker, has chosen as his topic, "Count Them Yourself."

The Pike County Medical Society, headed by Ballard Cassidy, M.D., will serve as host to the visiting societies of the district.

Ashland Site of April 11 Meet of 13th Councilor District

"You Wouldn't Want to Practice, If . . ." will be further developed by KSMA President Richard R. Slucher, M.D., Buechel, at a dinner meeting of the Thirteenth Councilor District in Ashland on Thursday, April 11, District Councilor Charles B. Johnson, M.D., Russell, has announced.

The morning scientific program will be held at the District Four State Tuberculosis Hospital. The subjects for the morning session of this day-long program had not reached the office of The Journal before

press time.

The afternoon program, also to be at the hospital, will include "Acute Thyroiditis," by Beverly T. Towery, M.D., Louisville, "Surgery of the Pancreas," Rudolph Noer, M. D., Louisville, "Building a Medical Center," William R. Willard, M.D., Lexington, "Early Carcinoma of the Cervix," J. P. Latour, M.D., Royal Victoria Hospital, Montreal, Canada.

The afternoon program will be followed by a social hour and a dinner in the ballroom of the Henry Clay Hotel. The Boyd County Medical Society, with P. G. Winn, M.D., as president, will be host to the other societies of the district.

Dr. Slucher Will Speak at Dist. Meet at Franklin

KSMA President Richard R. Slucher, Buechel, will discuss by comparison the topic, "Then and Now," at the Sixth District Councilor meeting to be held at the Franklin Country Club, Franklin, on April 23, Councilor L. O. Toomey, M.D., Bowling Green, announces.

The scientific program will be given by Samuel E. Paris, M.D., Bowling Green ophthalmologist. His subject is "Glaucoma—Its Diagnosis and Treatment."

There will be a social hour and a dinner. Arcey O. Miller, M.D., Scottsville, Sixth District president, will preside at the dinner meeting. The Simpson County Society, of which L. R. Wilson, M.D., Franklin, is president will act as host to the other district societies. Harold Keen, M.D., Bowling Green, is in charge of arrangements.

Memphis Surgeon, KSMA Head to Visit 1st Councilor Dist.

A Memphis surgeon will share the spotlight with KSMA President Richard R. Slucher, M.D., Buechel, at the April 24th meeting of the First Councilor District to be held in Paducah at the Ritz Hotel, J. Vernon Pace M.D., Paducah, District Councilor, has announced.

Dr. Slucher's subject will be "It Has Been Good to You, Too," and will be heard following the dinner and social hour.

The visiting out-of-state speaker, Thomas N. Stern, M.D., associate professor of medicine at the University of Tennessee, will discuss "Diagnosis of Subacute Bacterial Endocarditis."

C. P. Orr, M.D., Paducah, president of the McCracken County Medical Society, and the members of his organization will serve as host to the district meeting.

Register Now for May Primary

KSMA members and their families are reminded to register now to become eligible to vote in the May 28 primary election. County books are now open and registrations will continue until March 30.

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Each Multiple Compressed Tablet of MEPROLONE provides the inseparable antiarthritic, antirheumatic benefits of:

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2. *Meprobamate*—the newest and safest of the muscle-relaxant tranquilizers for profound relaxation of skeletal muscle in spasm.

Tolerance to this combination is good because there is little likelihood of sodium retention, potassium depletion or gastric distress with buffered prednisolone, and meprobamate rarely produces significant side effects in therapeutic dosage.

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INDICATIONS: A wide variety of conditions, in which four symptoms predominate: *a)* inflammation *b)* muscle spasm *c)* anxiety and tension *d)* discomfort and disability; i.e., rheumatoid arthritis, rheumatoid spondylitis (Marie-Strümpell disease), Still's disease, psoriatic arthritis, osteo-

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arthritis, bursitis, synovitis, tenosynovitis, myositis, fibrositis, fibromyositis, neuritis, acute and chronic low back pain, acute and chronic primary and secondary fibrositis and torticollis, intractable asthma, respiratory allergy, allergic and inflammatory eye and skin disorders (as maintenance therapy in disseminated lupus erythematosus, periarteritis nodosa, dermatomyositis and scleroderma).

SUPPLIED: Multiple Compressed Tablets in bottles of 100 in two formulas as follows: MEPROLONE-1—1.0 mg. of prednisolone, 200 mg. of meprobamate and 200 mg. of dried aluminum hydroxide gel. MEPROLONE-2—2.0 mg. of prednisolone in the same formula.

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Dr. Minish Succeeds Dr. Bell as Case-Discussions Editor

Joseph C. Bell, M.D., Louisville, who was appointed the first Case Discussion editor of The Journal of the KSMA in the spring of 1954, resigned effective February 1, according to Guy Aud, M.D., editor of The Journal. Larry Minish, M.D., Louisville, has been named to take Doctor Bell's place, the editor said.



Dr. Bell

Tribute was paid to Doctor Bell for the fine service that he had rendered to The Journal by Doctor Aud. He also expressed deep appreciation to Doctor Bell and to the Case Discussion group that Doctor Bell had organized among top faculty members at the University of Louisville School of Medicine, which had functioned so smoothly in producing the valuable series of case discussions that had been carried in The Journal.

"We look forward to working with Doctor Minish," Doctor Aud said. He described the new Case Discussion editor as quite capable and well qualified for the position. Doctor Minish said that he planned no changes in the present organization of this department of The Journal.

25 Kentucky Physicians Go to ACS Meet at New Orleans

Approximately 25 Kentucky physicians attended a sectional meeting of the American College of Surgeons held February 3-8 in New Orleans.

They included Daniel C. Elkin, M.D., Lancaster, president of the College, ACS, and Robert Lich, Jr., M.D., Louisville urologist and Hugh B. Lynn, Louisville pediatric surgeon, both of whom appeared on the program.

More than 2,500 physicians attended the conference which featured numerous panel discussions and symposiums.

Former Councilor Honored

Virgil G. Kinnaird, M.D., Lancaster, KSMA Councilor for 25 years, was named Outstanding Citizen of the Year by the Garrard County Junior Chamber of Commerce at a dinner in his honor on January 31 at Lancaster. KSMA Vice-President Carl Norfleet, M.D., Somerset, represented the KSMA at the dinner, attended by 150 persons.

Chief of staff at the Garrard County Memorial Hospital, Dr. Kinnaird was the first local citizen to be so honored. He is a graduate of the Jefferson Medical Centre, Philadelphia, and interned in New York and Pennsylvania hospitals before returning to Lancaster in 1915 to start his medical practice. He served with the U. S. Army in England and France during World War I.

UL Receives Markle Award, AMEF and NFME Grants

The University of Louisville School of Medicine received a distinguished national award and two grants from national foundations during the month of February.

The first, the Markle Scholarship, carries a five-year grant totaling \$30,000 to be used in furthering training or research. It was made through the medical school to a faculty member, Frank Falkner, M.D. J. Murray Kinsman, M.D., dean of the Medical School, said the scholarship is the first received at the University. Dr. Falkner, a Britisher, is an assistant professor of child health.

The other grants—one for \$39,570, from the National Fund for Medical Education, and one for \$9,093, from the American Medical Education Foundation—will be used to help with the school's general operating expenses.

The AMEF grant was one of those made to 83 medical schools across the nation in the Foundation's annual distribution of funds. The total amount made available for this purpose was \$1,072,727.

Each four-year medical school received a basic \$6,850 and the two year schools half of that amount. In addition to the basic grant, \$500,000 was given to earmarked schools as designated money. Simultaneously, with the AMEF distribution, the National Fund for Medical Education awarded grants to 82 accredited schools.

The KSMA Associate Committee for Contribution to the American Medical Education Foundation includes Claude C. Waldrop, M.D., Williamstown, J. Gant Gaither, M.D., Hopkinsville, Delou P. Hall, M.D., Louisville, Paul B. Hall, M.D., Paintsville, Coleman C. Johnston, M.D., Lexington.

Hospital Named for Dr. North

One of the country's oldest psychiatric hospitals, The Cincinnati Sanitarium, has officially changed its name to The Emerson A. North Hospital in honor of a physician once in residence there.

Dr. North, who died in 1953, was graduated from the College of Medicine, University of Cincinnati in 1906. He held a long succession of posts at the University and was made head of the department of psychiatry in 1931. Upon his resignation in 1942 he was given the honorary title of professor emeritus of psychiatry. Established in 1873, the North Hospital is equipped to provide all modern and accepted methods of psychiatric treatment.

Dr. Lucas Elected for 1958

Marvin A. Lucas, M.D., Louisville proctologist, has been chosen president-elect of the Jefferson County Medical Society. John S. Harter, M.D., Louisville surgeon, has been installed as president for 1957. He was elected last year. Irvin Abell, Jr., M.D., is the Society's retiring president. He is now a member of the nine-man board of governors of the Society.

Senior Day Program, April 15, Will Feature Dr. Portteus

"New Doctor—Old Doctor Professional Relations," will be the theme of Walter Portteus, M.D., im-



Dr. Portteus

mediate past president of the Indiana State Medical Association and one of medicine's public relations authorities, who is scheduled to bring the featured address at the Senior Day program in Louisville on Monday, April 15, according to an announcement by Richard G. Elliott, M.D., Lexington, chairman of the Senior Day Committee.

The morning session will be held at the Rankin Amphitheatre at General Hospital, at which time KSMA President Richard R. Slucher, M.D., will address the 1957 graduates. The afternoon and evening programs are to be held at the Kentucky Hotel.

Individual members of the Jefferson County Medical Society will serve as hosts to individual seniors, providing special attention for each future physician. Members of the Woman's Auxiliary to the KSMA will entertain the wives and sweethearts of the seniors while they are attending the meetings.

The program has been arranged to assist this year's medical school graduates in Kentucky at the University of Louisville in their career-planning. Discussions will center around such vital interests as getting on a hospital staff, postgraduate training opportunities, setting up a practice, consultations, fees, insurance, and the all-important "Human Equasions in Medical Practice."

PG Course in Pediatrics to be at Children's Hospital

A postgraduate course in Pediatrics, sponsored by the University of Louisville School of Medicine, the KSMA, and the Kentucky Academy of Pediatrics, will be held at Children's Hospital, Louisville, April 16 through June 4, 1957.

According to Garnett J. Sweeney, M.D., Liberty, chairman of the KSMA Committee on Postgraduate Education, sessions will be held each Tuesday during the eight-week period, beginning at 9:30 a.m. and continuing until 12:30 p.m. The program is under the supervision of Alex J. Steigman, M.D., head of the Pediatrics Department.

The scientific presentations scheduled are as follows: April 16—"Differential Diagnosis of Rheumatic Fever," Joseph A. Little, M.D., and "Rashes," W. C. Adams, M.D.; April 23—"Pyelonephritis," Mary Cruise, M.D., and "Acquired Hemolytic Anemia with

Special Emphasis on Erythroblastosis," Thomas Stevenson, M.D.;

April 30—"Surgical Emergencies of the Newborn," Hugh B. Lynn, M.D., "Strabismus," Arthur Keeney, M.D., and "Burns," Bernard Schoo, M.D.; May 7—"Well Baby Care," Mary Cruise, M.D. and "Bad Habits," Robert E. Gotcher, M.D.; May 14—"Adolescence," Frank Falkner, M.D. and "Precocious Puberty and Adrenogenital Syndrome," Joseph A. Little, M.D.;

May 21—"Allergic Child," Alex J. Steigman, M.D., and "Indigestion," Frank Falkner, M.D.; May 28—"Fever Undetermined Origin," Alex J. Steigman, M.D., and "The Use of X-Ray in Pediatrics," L. A. Davis, M.D.; June 4—"Drug Dosage and Dangers," William C. Adams, M.D.

A conference or a question-and-answer period will be featured at each meeting. Visual aids will be used with several of the scientific presentations. A ten-minute coffee break, allowing for informal discussion, is included in each weekly schedule.

Program to Test Foreign MDs is Planned by ECFMG

Soon to be effected is a new program offering world-wide tests for foreign doctors wishing to practice in the United States, according to J. Murray Kinsman, M.D., dean of the University of Louisville School of Medicine and president of the Educational Council for Foreign Medical Graduates, the national body that will inaugurate the program.

The plan is expected to get under way in April. It is designed to encourage physicians to come here, to ensure their competence, and to help relieve the doctor-shortage in this country. It would enable hospitals and State licensing boards to judge ability on the tests given rather than having to limit consideration to the medical school where the applicant trained. The examinations are voluntary and will be offered first to foreign doctors now studying here.

Licensing laws would have to be changed in many states to make use of the tests. The Kentucky State Board of Health, the State's licensing body, generally requires hospital training in this country in addition to graduation from an AMA-approved school.

The ten-member Council of the year-old ECFMG has two directors each from the AMA, the American Hospital Association, the Federation of State Medical Boards and the Association of American Medical Colleges, plus one each from HEW and the Defense Department. Dr. Kinsman said that about \$200,000 is needed for its first two years of operation. Half that amount has already been pledged by the Kellogg Foundation if the other can be raised elsewhere. An ECFMG report states that more than 7,000 foreign doctors were training in the U. S. in 1955.

added certainty in antibiotic therapy
—particularly for that 90%
of the patient population
treated in home or office
where sensitivity testing
may not be practical . . .



for your
entire
patient
population

multi-spectrum
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CELEBRANDIN TETRACYCLINE



100% EFFECTIVE in respiratory infections including the 25% due to resistant staphylococci.¹⁻³

97% EFFECTIVE in dermatologic and mixed soft tissue infections including the 22% resistant to one or more antibiotics.³⁻⁶

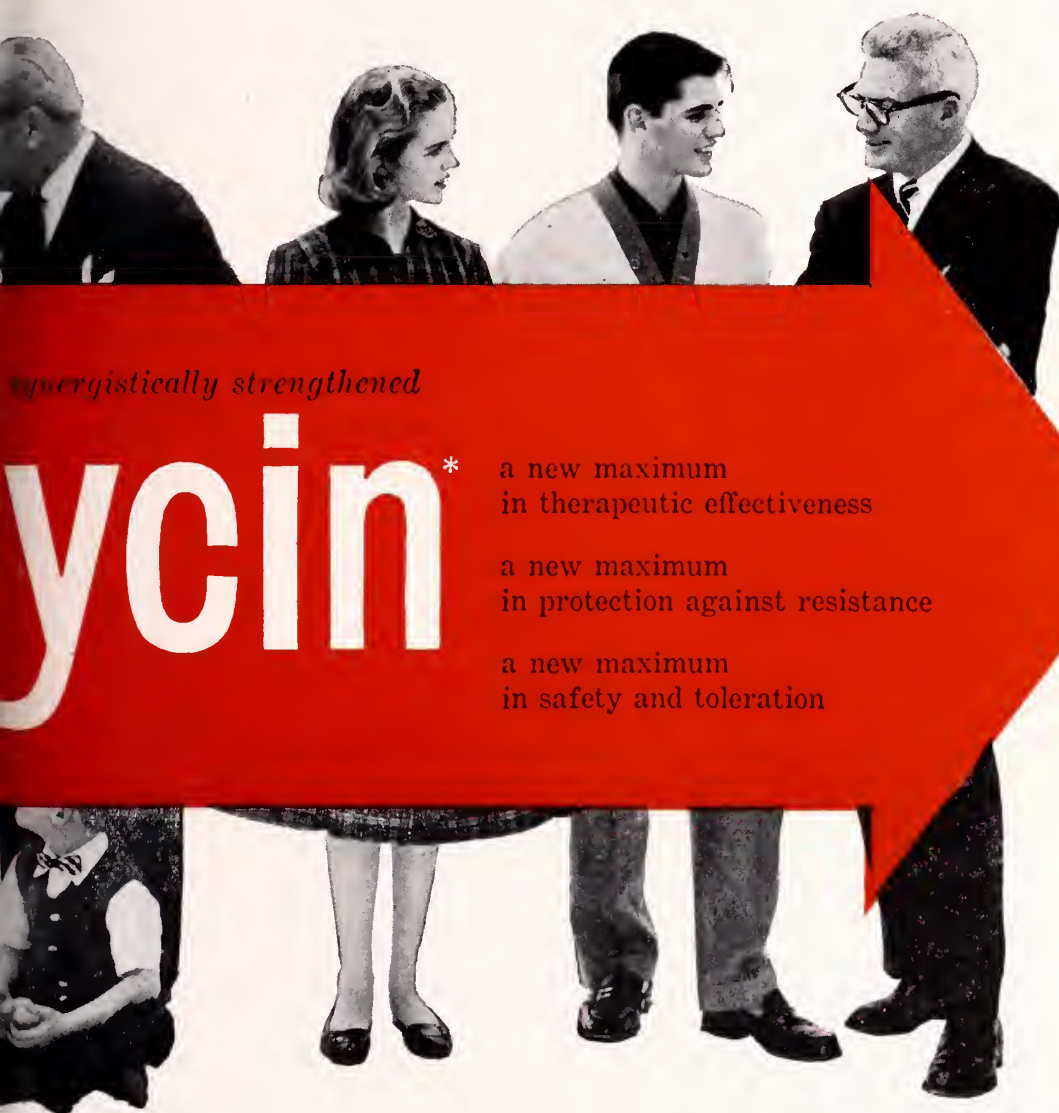
84.6% EFFECTIVE in genitourinary infections including the 61% resistant to other antibiotic therapy.^{2,5}

93% EFFECTIVE in diverse infections including the 21% due to resistant pathogens.^{1,5}

98.7% EFFECTIVE in tropical infections including those complicated by heavy bacterial contamination or multiple parasitisms.⁷

1. Carter, C. H., and Maley, M. C.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 51.
2. Shalowitz, M., and Sarnoff, H. S.: Personal communication.
3. Shubin, M.: Personal communication.
4. La Caille, R. A., and Prigot, A.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 67.
5. Winton, S. S., and Cheserow, E.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 55.
6. Cornbleet, T.: Personal communication.
7. Loughlin, E. H.; Mullin, W. G.; Aleinder, L., and Joseph, A. A.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 63.

the antimicrobial spectrum of tetracycline extended and potentiated with oleandomycin (Matromycin®) to combat resistant strains of pathogens—particularly resistant staphylococci—and to delay or prevent the emergence of new antibiotic-resistant strains.



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a new maximum
in therapeutic effectiveness

a new maximum
in protection against resistance

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CAPSULES: 250 mg.
(oleandomycin
83 mg., tetracycline
167 mg.). Bottles
of 16 and 100.
new mint-flavored
ORAL SUSPENSION:
1.5 Gm., 125 mg.
per 5 cc. teaspoonful
(oleandomycin
42 mg., tetracycline
83 mg.) 2 oz. bottle.

*TRADEMARK



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VA Home Town Treatment Paper Work Reduced

There has been inaugurated in the Veterans Administration a policy that will reduce paper work of physicians in connection with the Home Town treatment of veterans requiring long term outpatient treatment. Previously it has been the established policy to issue authorities for treatment to fee base physicians on a monthly basis in all types of cases.

An exception to this practice will be made in authorizing treatment in selected cases requiring long term treatment. Authorities will be issued on an estimated monthly basis, issuing one authority which will cover a number of months, depending on the time that the authority is issued during the fiscal year.

For instance, authorities issued March 1, 1957, may be issued in these selected cases to June 30, 1957. Authorities issued July 1 may cover the entire fiscal year ending June 30, 1958, or any number of months treatment indicated during the fiscal year. It will be necessary that the physician estimate the approximate number of treatments that will be required per month. This will be multiplied by the number of months the treatment is authorized.

Physicians will not be required to submit a report monthly in these long term cases, although a report will be required every three months unless it is determined that a more frequent report is indicated. These three months' reports will be more complete and meaningful than has been generally the case in the past. Payment for services will be made on a monthly basis upon receipt of an itemized statement from the physician on his own letterhead.

Veterans to be considered for long term treatment are those already receiving Home Town treatment for service-connected disabilities, such as diabetes, chronic chest conditions, gastrointestinal, vascular diseases, certain neurological conditions and metabolic conditions, and other chronically ill patients.

Physicians who desire to participate in the plan of treatment of veterans in accordance with a Schedule of Fees submitted by the Kentucky State Medical Association and accepted by the Veterans Administration should inform the Secretary of the State Medical Association, 620 South Third Street, Louisville 2, Kentucky.

If any additional information is desired in connection with the treatment of veterans, physicians should address their communications to the Chief Medical Officer, Veterans Administration Regional Office, 1405 West Broadway, Louisville 3, Kentucky.

Oliver P. Miller, M.D.
Chief Medical Officer

AMA Legal Meet is March 15-16

John D. Gordinier, M.D., Louisville, will represent the KSMA at a medicolegal symposium, the first of a series of three legal meetings sponsored by the American Medical Association, which will be held at the Atlanta-Biltmore Hotel, Atlanta, Ga., March 15-16. Other meetings in the medicolegal series will be held in Denver, March 22-23 and in Philadelphia, March 29-30.

Woman's Auxiliary Plans for Annual Meeting

Reports were heard and plans made for the 1957 Annual Meeting of the Woman's Auxiliary to the KSMA at an Auxiliary Board of Directors Meeting in Lexington, February 14, according to Mrs. Glenn Bryant, publicity chairman.

The Annual Meeting of the Woman's Auxiliary will be held in Louisville September 17-19, coincident with the Annual Meeting of the KSMA. Mrs. Charles B. Stacy, Pineville, is the Auxiliary president.

Mrs. Clark Bailey, chairman of the Rural Health Committee, elaborated on plans of the Auxiliary members to attend the National Rural Health Conference in Louisville on March 7-9. The Auxiliary was working she said, with local community groups to try to assure that at least eight rural health promoters from each county attend the Conference.

Sigma Xi Meet Will Be May 17

E. V. Cowdry, M.D., Director of the Wernse Cancer Research Laboratory, Washington University School of Medicine, will speak at the annual banquet and initiation ceremonies of the Kentucky Chapter of the Society of the Sigma Xi, on May 17, 1957 at Lexington.

The dinner will be held in the Bluegrass Room in the Student Union Building at the University of Kentucky, beginning at 6:00 p.m. M. Scherago, president, Ky. Chapter, Society of the Sigma Xi, extends an invitation to all Kentucky physicians to attend the banquet.

Dr. Bailey Named to AMA Group

Clark Bailey, M.D., Harlan, past KSMA president and senior delegate from Kentucky to the AMA House of Delegates, has been appointed to serve a third three-year term on the AMA's Committee for Study of Medical Care of Industrial Workers. This is a committee jointly appointed by the AMA Council on Medical Services and the Council on Industrial Medicine.

The U. S. Treasury has announced its request to the Congress to enact legislation which will permit an increase in the interest rate on new sales of U. S. Savings Bonds. Passage of the legislation will permit the Treasury to go forward with plans to offer improved interest rate terms on all Series E and H bonds sold on or after Feb. 1, 1957.

The Tenth Annual Postgraduate Course on Diseases of the Chest, sponsored by the Council on Postgraduate Medical Education, American College of Chest Physicians and the Laennec Society of Philadelphia, in cooperation with the Pennsylvania Chapter of the American College of Chest physicians, will be held at the Bellevue-Stratford Hotel, Philadelphia, April 1-5, 1957. The tuition fee: \$75. For further information, contact: American College of Chest Physicians, 112 East Chestnut St., Chicago 11, Ill.

Don Nelson, of Ellerbe and Company, St. Paul, architectural firm in charge of designing the new Medical Center, is also working full time at the Center's offices. Among other outstanding medical buildings, this firm designed are the Mayo and Cleveland Clinics and the University of Florida Health Center.

In completing final plans for the new medical school, in implementing the program and in subsequent evaluation of its services, Dean Willard and his staff plan full cooperation with KSMA as well as other County, State and University committees and representatives.

Only broad general areas of the new Medical Center program have been mentioned here. Within each almost limitless area, many specific objectives will be defined and many further planning sessions are expected to be held as the program advances.

U of K Accepts \$73,400 Grant from Commonwealth Fund

A \$73,400 grant has been awarded the Medical Center at the University of Kentucky by the Commonwealth Fund, according to an announcement by Frank G. Dickey, University president.

The grant will provide funds for a series of surveys to be conducted by the Medical Center staff, including studies of patient care, health survey needs in Kentucky and sociological factors related to health patterns in the State. A planning program for dentistry and nursing at the Medical Center will also be supported by the grant.

Expenses connected with the administration and operation of the Center can not be included in the award. However, a portion of it can be used to employ supplementary staff members and secretarial help for the planning studies.

Over 300 Register for Heart Diseases Symposium

More than 300 medical personnel, including representatives from eight states, registered for the two-day symposium on Cardiovascular Diseases in Louisville February 1-2.

The meeting was held under the auspices of the Heart Association of Louisville and Jefferson County and the University of Louisville School of Medicine.

Among the seven out-of-state heart specialists who spoke at this largest local heart symposium to date was Edgar V. Allen, M.D., senior consultant of the Mayo Foundation in Rochester and president of the American Heart Association. He stated that \$20,000,000 has been spent on heart research in the past eight years by the AHA. Kentucky raised \$289,000 for the fund in 1956.

STUDENT AMA

In the Spring of 1955, the Louisville Chapter of the Student American Medical Association established an Annual Spring Lectureship. With this lectureship the Chapter tries to present to the students, faculty, and other persons who are interested, a man who is tops in his field and who not only has a worthwhile and timely topic but an unique and inspiring presentation.

On Monday, April 8, 1957, we will present a man from Louisville who is well versed in a topic that is confusing but still of the utmost interest to each one of us—the atom bomb.

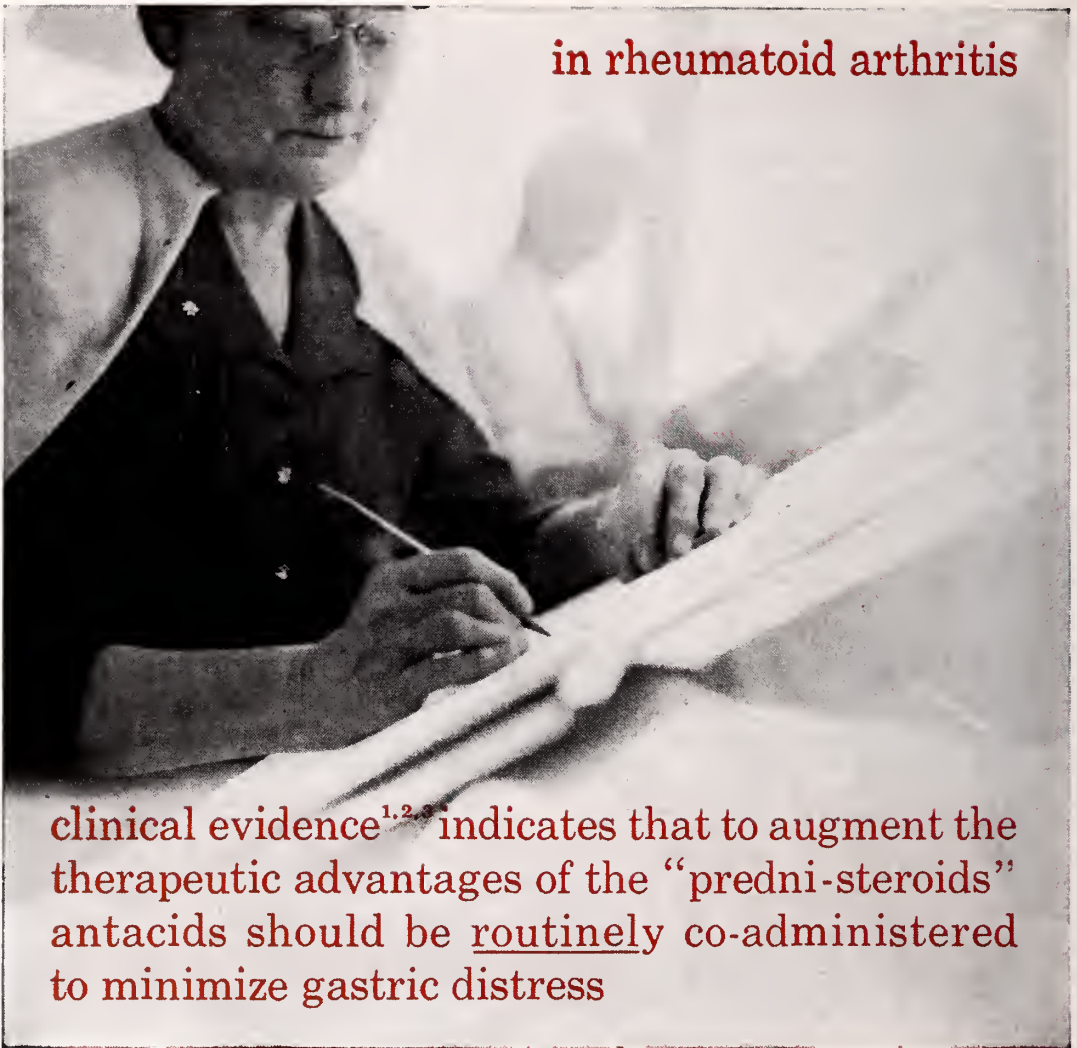
Sam Adkins, assistant Sunday editor of The Courier-Journal, not only has first hand experience with atom bomb testing, but devotes himself to keeping abreast of the day-to-day developments of this deadly but controversial weapon.

Mr. Adkins was born in Tennessee, reared in Knoxville, and attended Tennessee Wesleyan College and the University of Tennessee. He entered newspaper work in 1928 as a reporter for the Knoxville Dispatch and since then has served in various editorial positions for the following papers; The Knoxville Times, The Knoxville Free Press, The Knoxville Journal, The Chattanooga Free Press, and the Philadelphia Record. He joined the Louisville Courier-Journal in 1941. In this capacity he has done much travelling which includes:

1. War Correspondent to Europe, crossing the North Atlantic in the first LST to make that voyage.
2. Flying in the first 1000 bomber raid over Germany.
3. One of 50 correspondents to hit the Normandy beachhead, Easy Red (Omaha) Beach, on D-Day.
4. Correspondent on the defeat of the Germans in France.
5. An official journalist-observer at the atomic bomb tests at Bikini.

On behalf of the Louisville Chapter of SAMA I want to extend to each reader of the KSMA Journal an invitation to hear Mr. Adkin's discussion of the history of mankind's production of weapons and how he now "Flirts with Death." This will be in the Rankin Amphitheater of Louisville General Hospital at 12:00 noon Monday, April 8, 1957.

Robert G. Overstreet, President
U. of L. Chapter, SAMA



in rheumatoid arthritis

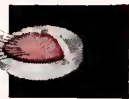
clinical evidence^{1,2,3} indicates that to augment the therapeutic advantages of the "predni-steroids" antacids should be routinely co-administered to minimize gastric distress

ROUTINE
CO-ADMINISTRATION
MEANS

'Co-Hydeltra'
(Prednisolone Buffered)



Multiple
Compressed
Tablets



2.5 mg. or 5 mg.
prednisone or
prednisolone with
50 mg. magnesium
trisilicate and
300 mg. aluminum
hydroxide gel.

All the benefits of the "predni-steroids" plus positive antacid action to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* 160:613 (February 25) 1956. 2. Margolis, H. M. *et al.*, *J.A.M.A.* 158:454 (June 11) 1955. 3. Bollet, A. J. *et al.*, *J.A.M.A.* 158:459 (June 11) 1955.

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(Prednisone Buffered)



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1. Color coded diets of 1200, 1600 and 1800 calories are based on nutritionally tested Food Exchanges.¹

2. The easy-to-use Food Exchanges (called Choices in booklet) simplify diet management by eliminating calorie counting.

3. Diets promote accurate adjustment of caloric levels to the special needs of the patient yet allow each individual considerable latitude in the choice of foods.

4. More than six dozen appetizing, low-calorie recipes are described in the last fourteen pages of the diet booklet.

1. The Food Exchange Lists referred to are based on material in "Meal Planning with Exchange Lists" prepared by Committees of the American Diabetes Association, Inc., and The American Dietetic Association in cooperation with the Chronic Disease Program, Public Health Service, Department of Health, Education and Welfare.

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Johnstown, N. Y.



Please send me dozen copies of the new, illustrated Knox Reducing booklet based on Food Exchanges.

Your Name and Address.

News Items

Patrick J. Cavanaugh, M.D., assumed his duties as instructor in Radiology at the University of Louisville School of Medicine on January 1. Dr. Cavanaugh was graduated from St. Louis University School of Medicine in 1951 and served an internship at Norfolk Marine Hospital in Virginia in 1951-52. He was with the U. S. Public Health Service in 1952-53. From 1953-55 he was a resident physician in Therapeutic Radiology at Penrose Cancer Hospital, Colorado Springs, Colo., and in 1955-56 served a traveling fellowship in Radiology, spending several months each in England, France and Sweden.

Si Past, Jr., M.D., formerly of Chattanooga, has opened a practice in Sharpsburg. Graduated from Duke University School of Medicine in 1954, Dr. Past interned at Methodist Hospital, Brooklyn, New York, and served two years in the U. S. Air Force.

W. R. Parks, M.D., who was a member of KSMA for thirty-five years, and recently retired from private practice at Harlan, is now living in Roanoke, Va. He is currently "filling in" at the Veterans Hospital at Roanoke.

Paul A. Wolf, M.D., has begun a practice in Okolona. Dr. Wolf, a graduate of the University of Louisville School of Medicine in 1954, interned in Philadelphia with residency in general practice. He is a native of New York and practiced a year in Madison, West Va., before moving to Louisville.

David W. Drye, M.D., Bradfordsville, was honored as his home community's Man of the Year at Bradfordsville in "This is Your Life" type of program at Bradfordsville on January 11. His selection was a joint project of the churches in the local area. Following his graduation from the University of Louisville School of Medicine in 1953, Dr. Drye interned at General Hospital, Montreal, Canada, and served a residency at Cleveland's Babies and Children's Hospital before coming to his native Bradfordsville to practice. He is president of the Marion-Washington County Medical Association.

Six additional Fellowships for Residents in Ophthalmology, to begin July 1, have been announced by the Guild of Prescription Opticians of America, Inc. Each Fellowship is for a total of \$1,800, payable monthly over a three-year Residency period. Application forms may be obtained from: Fellowships, Guild of Prescription Opticians of America, Inc., 110 East 23rd Street, New York 10, N. Y. Applications must be received by May 15, 1957.



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KENTUCKY

FOR ALL TYPES OF NERVOUS AND MENTAL DISEASES, AND ALCOHOLISM

**Member of the American Hospital Association and National Association
of Private Psychiatric Hospitals**

Four modern buildings, separate for men and women
Individual rooms. All buildings equipped with radio.
Recreation.

Hydrotherapy, Electrotherapy. Up-to-date psychiatric
methods. Electric and Insulin Shock treatments. Psycho-
therapy.

L. A. BUTTERFIELD,
Hospital Administrator

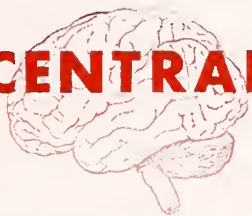
Registered nurses and trained personnel. Constant
medical supervision. Open to members of the Medical
Association.

Located on the LaGrange Road, ten miles from Louis-
ville, on the Louisville-LaGrange bus line.

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Medical Director

T. J. SMITH, M.D., Associate

Both **CENTRAL** and **PERIPHERAL**



control of cough

SYNEPHRICOL[®] cough syrup

ANTITUSSIVE • DECONGESTANT • ANTIHISTAMINIC

Combines:

Central Antitussive Effect — mild, dependable
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plus Antihistaminic and Expectorant Action

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Each teaspoonful (4 cc.) contains:

Neo-Synephrine [®] hydrochloride	5.0 mg.
Thenfadin [®] hydrochloride	4.0 mg.
Dihydrocodeinone bitartrate	1.33 mg.
Potassium gualacol sulfonate	70.0 mg.
Ammonium chloride	70.0 mg.
Menthol	1.0 mg.
Chloroform	0.02 cc.
Alcohol	8%

Bottles of 16 fl. oz.

EXEMPT NARCOTIC

Dorothy T. Magallon, M.D., has been named director of communicable-disease control for the Louisville-Jefferson County Health Department. A graduate of Washington University Medical School, St. Louis, Dr. Magallon had a three-year residency at Barnes Hospital and St. Louis City Hospital, both in St. Louis.

Jack T. Morford, M.D., a native of West Virginia and graduate of the University of Louisville School of Medicine in the Class of 1945, was named president of the Carlisle Chamber of Commerce for 1957. Dr. Morford practiced medicine in Carlisle prior to serving two years in the U. S. Army at Panama, and returned to his Carlisle practice upon his discharge in 1949.

Victor E. Scherer, M.D., is presently practicing at Fountain Run in Monroe County. Dr. Scherer was graduated from the University of Western Ontario Faculty of Medicine in 1945. He served an internship in Canada and residencies at Nashville General Hospital and Baylor University Hospital in the United States.

George Estill, M.D., Maysville, was named as the "Outstanding Young Man of 1956 in Mason County" by the Maysville Junior Chamber of Commerce. In addition to his city and county practice, Dr. Estill was recognized for his work as director of the local civil defense medical program, his time given to health problems, and voluntary service with visiting blood-mobiles. A graduate of the Georgetown University School of Medicine, Washington, D. C., in 1952, Dr. Estill interned at Cincinnati Dispensary and Emergency Hospital. He is secretary-treasurer of the Mason County Medical Society.

• **Boyd Van Buren Baker, M.D.**, formerly of Hazard, has announced the opening of a medical practice at Grayson in Carter County. Dr. Baker was graduated in 1912 from Lincoln Memorial University Medical Department at Knoxville.

Roy Edwards, Jr., M.D., former superintendent of Western State Hospital at Hopkinsville, has been named acting superintendent of Huntington State Hospital in West Virginia. Dr. Edwards is a native of Huntington. He declined permanent appointment to the hospital post.

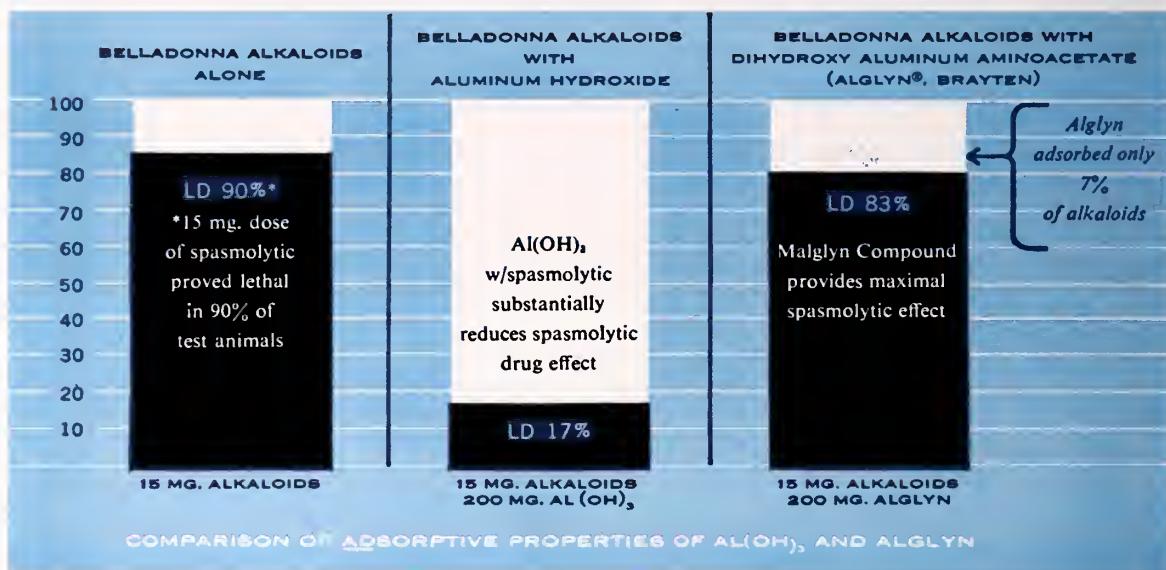
Malglyn[®] COMPOUND

(dihydroxy aluminum aminoacetate with belladonna alkaloids and phenobarbital)

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It's no wonder that of the many antacid-spasmolytic formulations promoted to the medical profession, so many physicians have found MALGLYN the most consistent in clinical effectiveness.

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The above laboratory study clearly indicates that the antacid ALGLYN, contained in the MALGLYN formula, does not materially interfere with the therapeutic effectiveness of its contained belladonna alkaloids. On the other hand, the marked *adsorptive* properties of aluminum hydroxide renders its combination with belladonna alkaloids both uneconomical and therapeutically unreliable.

For both rapid and prolonged antacid effect, with consistently effective spasmolytic and sedative action, rely upon MALGLYN for treatment of peptic ulcer and epigastric distress.

each tablet contains

dihydroxy aluminum aminoacetate, N.N.R.	0.5 GM.
belladonna alkaloids (as sulfates)	0.162 MG.
phenobarbital	16.2 MG.

Also supplied: ALGLYN[®] (dihydroxy aluminum aminoacetate, N.N.R. 0.5 Gm per tablet). BELGLYN[®] (dihydroxy aluminum aminoacetate, N.N.R., 0.5 Gm. and belladonna alkaloids, 0.162 mg. per tablet).

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INCREMIN offers L-Lysine for protein utilization, and essential vitamins noted for outstanding ability to stimulate appetite, overcome anorexia.

Specify INCREMIN in either Drops (cherry flavor) or Tablets (caramel flavor). Same formula. Tablets, highly palatable, may be orally dissolved, chewed, or swallowed. Drops, delicious, may be mixed with milk, milk formula, or other liquid; offered in 15 cc. polyethylene dropper bottle.

Each INCREMIN Tablet
or each cc. of INCREMIN Drops contains:

L-Lysine	300 mg.	Pyridoxine (B ₆)	5 mg.
Vitamin B ₁₂	25 mcgm.	(INCREMIN Drops contain 1% alcohol)	
Thiamine (B ₁)	10 mg.		

Reg. U. S. Pat. Off.

Dosage only 1 INCREMIN TABLET or 10-20 INCREMIN Drops daily.



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Tri-Cities Hospital Pushed

The tri-city area of Florence, Erlanger and Elsmere is pushing plans for a complete hospital. Representatives of the three cities met recently with members of the Hilltop Hospital Association to further the project through discussion of surveys and fund raising campaigns.

According to Florence Mayor William Fitzgerald, state and federal funds may be available for the 100-bed hospital, considered necessary because emergency runs to the Covington hospitals are often slowed by crowded conditions of the Dixie Highway.

Chest Diseases Symposium

The Tenth Monthly Symposium on Diseases of the Chest was held at District One State TB Hospital, Madisonville, on Wednesday, March 6, 1957.

Scientific papers scheduled for presentation included: "Public Health Aspects of Tuberculosis," Donald P. Conwell, M.D., Louisville, "Laboratory Procedures in the Diagnosis of Pulmonic Disease," Stephen Chapman, M.D., Louisville, "Fungus Disease of the Lung," Joseph K. Newton, M.D., Outwood, and "Pneumonconiosis," David W. Parsons, M.D., Madisonville.

In Memoriam

D. B. SOUTHARD, M.D.
Stanford
1875 - 1957

A practicing physician of Standord for 44 years prior to his retirement last July, Dr. Southard died January 18 at his home after a long illness.

A graduate of the Louisville Medical College in 1898, Dr. Southard's early practice was at Mt. Vernon. He moved to Stanford in 1912. He also served as health officer for Lincoln and Casey counties for seven years.

HOLLAND BREEDING SIMPSON
Greensburg
1882 - 1957

Dr. Simpson died January 28 at his home at Greensburg. He suffered a stroke in 1955 and had been confined to his bed since a fall last October that broke his hip.

A native of Breeding in Adair County, he was graduated from the University of Louisville Medical Department in 1907. He practiced medicine at Breeding from 1907 until 1924, when he moved to Greensburg. Seriously injured in an automobile accident in 1942, Dr. Simpson was forced to retire from his practice.

NEW *R_x*

A.P.C.^{WITH} Demerol[®]
Tablets

Each tablet contains:



Aspirin	200 mg. (3 grains)
Phenacetin	150 mg. (2½ grains)
Caffeine	30 mg. (½ grain)
Demerol hydrochloride....	30 mg. (½ grain)



Average Dose:

1 or 2 tablets.

Narcotic blank required.

Potentiated Pain Relief

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County Society Reports

McCracken

Samuel L. French, M.D., Paducah, presented a paper on "The Function of the West Kentucky Center for Handicapped Children," at the January meeting of the McCracken County Medical Society.

The presiding officer, C. P. Orr, M.D., Paducah, led a discussion on the need for a local school of practical nursing. The discussion was at the request of the city school superintendent, whose office would administer the program with the approval of the State Board of Nursing Education and Nurse Registration, and use the local hospital facilities for clinical training. The nursing program was unanimously approved by the Society.

It was reported that the establishment of a mental health center would be delayed due to lack of qualified personnel, including a speech therapist and a psychiatrist.

Vernon D. Pettit, M.D., Secretary

Shelby-Oldham

Twenty-three members were in attendance at the January meeting of the Shelby-Oldham County Medical Society, held at Stone Inn, Simpsonville. Guest essayists included George S. Allen, M.D., and Malcolm Barnes, M.D., both of Louisville. They presented a paper on "Cervicitis."

During the business session Jerald E. Adams, Jr., M.D., was elected as a member of the Society.

It was voted that the next regular meeting would be held on February 28 at Stone Inn.

C. C. Risk, M.D., Secretary

Wayne

Jack Hill, M.D., of Somerset, gave an informal discussion on "Female Urethritis" at the January 24 meeting of the Wayne County Medical Society.

All local dentists were invited to the meeting, which was held at Hotel Breeding, Monticello.

Thursday, February 28, was named as the date of the next meeting. It would be held at the same location.

W. R. Kelsay, Jr., M.D., Secretary

in dysmenorrhea



Pavatrine[®] with Phenobarbital

125 mg.

15 mg.

- *relaxes the hypertonic uterus thus relieving pain*
- *furnishes gentle sedation*

Dosage: one tablet three times a day beginning three to five days before onset of menstruation.

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EVERY WOMAN WHO SUFFERS

IN THE MENOPAUSE DESERVES

"PREMARIN"[®]

*widely used
natural, oral
estrogen*

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PERTINENT PARAGRAPHS

The Frank E. Bunts Educational Institute, affiliated with The Cleveland Clinic Foundation, announces a two-day postgraduate continuation course in Obstetrics and Gynecology, to be presented Wednesday and Thursday, March 21 and 22, 1957. Registration fee is \$15, except for interns, residents, and uniformed members of the Armed Forces, who will be admitted free. Address: Registrar, Frank E. Bunts Educational Institute, 2020 East 93 St., Cleveland 6, Ohio.

The medical profession ranked highest in community prestige in the minds of teen-agers, according to a recent survey conducted by an advanced public relations class at Ohio University, Athens. The engineering profession ranked second. The polling, instigated at the request of the Ohio Society of Professional Engineers, covered a total of 705 respondents.

The eighth Annual Symposium on Recent Advances in the Study of Venereal Diseases will be held in the auditorium of the Department of Health, Education, and Welfare, Washington, D.C., April 24-25, 1957. Topics to be discussed will cover many aspects of venereal disease control. Sessions are open to all interested physicians and workers in allied professions.

Dedication ceremonies for the headquarters building of the Association of American Medical Colleges, 2530 Ridge Avenue, Evanston, Ill., were held February 10. The building houses the offices of the Association's Executive Director and Secretary and their staff; the Medical Audio-Visual Institute; the Journal of Medical Education; and the Study Section of the Association's Committee on Education Research and Services. Northwestern University donated the site for the building.

A Bahamas Medical Conference will be held April 23-30, 1957, at the British Colonial Hotel and the Princess Margaret Hospital in Nassau. Americans do not need passports, only evidence of citizenship. Lack of tropical illnesses makes inoculations unnecessary. Certificates of attendance for U. S. income tax purposes will be issued to Conference participants. Hotel reservations should be made early by writing: Mr. Robert K. Holiday, Reservations Manager, British Colonial Hotel, Nassau, Bahamas, and enclosing at the same time the registration fee of \$75.

PERTINENT PARAGRAPHS

The Thirtieth Annual Spring Congress in Ophthalmology and Otolaryngology and allied specialties will be held April 1-6, 1957 at the Patrick Henry Hotel, in Roanoke, Va. Registration fee will be \$80 for the full program and \$40 for one-half the sessions. In registering with Dr. E. G. Gill, Box 1789, Roanoke, Va., a check for \$20 will be required, with the remaining fee payable on Matriculation Day, beginning April 1 at the Patrick Henry Hotel. The Otolaryngology sessions will be held April 1-3, the Ophthalmology on April 4-6.

A three-day postgraduate course on Gastroenterology will be presented at the University of Colorado School of Medicine in Denver, May 13-15, 1957. The faculty will include 28 nationally-known guest physicians, co-sponsored by the University and the American Gastroenterological Association. Hermon Taylor, M.D. of London, England, will tell of the present status of medicine in his country, at a dinner held in his honor by the Colorado Society of Internal Medicine. For information write to: The Office of Postgraduate Medical Education, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver 20, Colo.

The World Congress of Gastroenterology will be held in Washington, D.C., May 25-31, 1958 at the Sheraton Park Hotel. This Congress is being sponsored by the International Society of Gastroenterology and the host organization in this country is the American Gastroenterological Association. Major subjects to be considered at the scientific session are: Peptic Ulcer, Malabsorption and Sprue-like Syndromes, Nutrition and its effect on the Liver and Pancreas, Intestinal Infection and Infestation, Cancer of the Stomach.

The following short refresher courses will be given at The Children's Hospital of Philadelphia in May and June 1957: (1) PEDIATRIC ADVANCES FOR PEDIATRICIANS AND GENERAL PRACTITIONERS, May 27-31, Tuition—\$110; (2) PRACTICAL PEDIATRIC HEMATOLOGY, June 3, 4, and 5, Tuition—\$75; (3) BLOOD GROUP INCOMPATIBILITIES AND ERYTHROBLASTOSIS FETALIS, June 6-7, Tuition—\$50. Address inquiries to: Irving J. Wolman, M.D., Children's Hospital of Philadelphia, 1740 Bainbridge St., Philadelphia 46, Pa.

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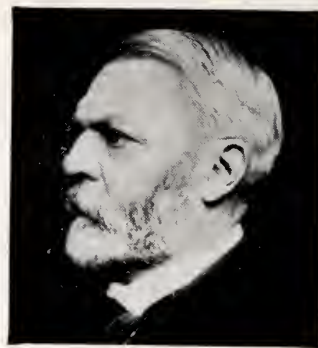
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*Ferguson, J. T.: J. Am. Geriatrics Soc. 4:1080, 1956.



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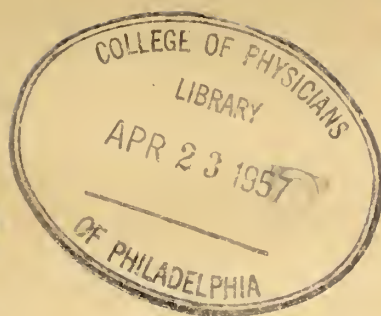
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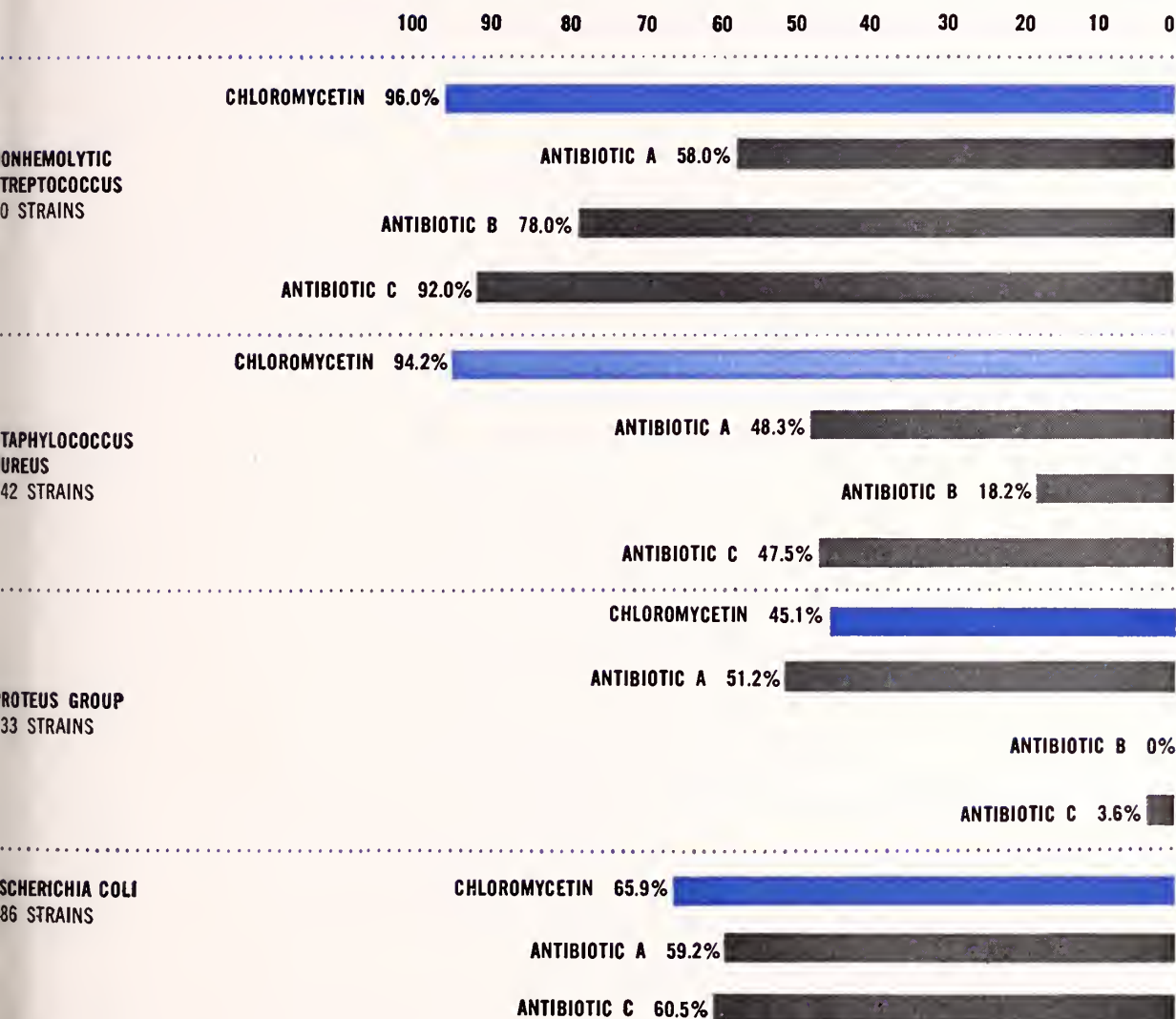
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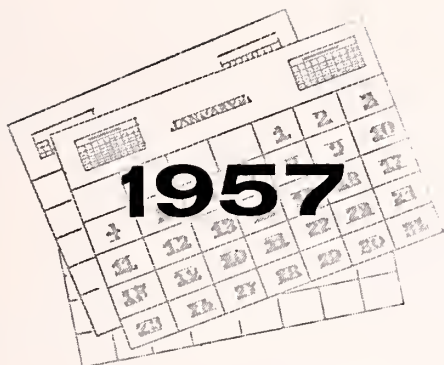
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 'Perazil' offers far more than hope. It gives
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long-lasting action • exceptionally little side effect

For children and adults: SUGAR-COATED TABLETS OF 25 mg.
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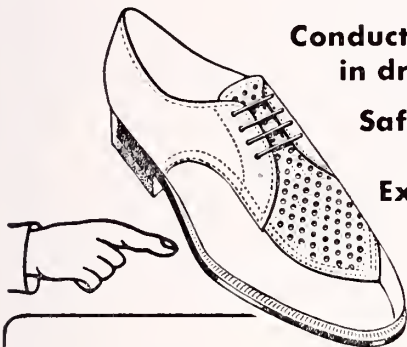
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PUBLIC HEALTH PAGE

THE PROBLEM OF MENTAL RETARDATION

RUSSELL E. TEAGUE, M.D.

Commissioner of Health

State of Kentucky

Every day the physicians in Kentucky are faced with a problem that is causing them more and more concern. Mental retardation research has brought forth so much information that incomplete diagnosis, evaluation, and treatment are threats to our competence as physicians. The magnitude of the general problem of Mental Retardation is realized by the fact there are at least 15,000 individuals in our state that need total and complete care and 75,000 others who need specialized training, education, and health care.

When this handicap is present in one child in a family, there are two parents and an average of two siblings who are affected emotionally to the extent that they do not function in our society at the level they should. Thus Mental Retardation poses a problem which affects approximately ten per cent of our population in one way or another.

The responsibility of the physician is grave and because of the multiple disciplines such as psychiatry, neurology, psychology, speech therapy, ophthalmology, etc., which are required to completely diagnose and evaluate these individuals, it is almost impossible for any one individual doctor to do.

The value of a complete diagnosis is essential since in some clinics it has been found that as high as 15 per cent of the children previously classified as mentally retarded actually had I. Q.'s of normal or above. Giving advice to parents concerning future pregnancies is an everyday problem and this cannot be done without knowledge of the exact causation. A complete diagnosis is needed also, in order to counsel and prepare the parents for caring for their children and to help plan future training and education.

Recognizing these needs, the Maternal and Child Health Division of the State Health Department, in conjunction with the University of Louisville School of Medicine, utilizing funds made available by the Children's Bureau, will set up an Evaluation Center in Louisville. It is planned that this center, composed of all the specialties, medical, social, and educational, will be able to service the entire state. It will be used for training and educating physicians, social workers and psychologists in establishing special services needed for retarded children; and will do some basic research in this field. Dr. Martin Z. Kaplan, a Louisville pediatrician, has been appointed Medical Director of the center. Tentative opening date has been set for July 1, 1957.

who coughed?

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Recent metabolic studies have established rational feeding procedures for prematures.

The initial feeding, 12 hours after birth, consists of one dram of 5 per cent dextrose. This solution is increased by one dram at 2-hour intervals if tolerated and retained.

After twenty-four hours, breast milk or formula (table below) gradually replaces the prelacteal feeding at 2-hour intervals. The volume of a feeding may be increased up to 2 drams daily until maintenance caloric requirements are fulfilled by the fifth day. If the infant shows signs of intolerance, the formula increase is made more slowly and the fluid requirement fulfilled parenterally.

Successful feeding mixtures consist of dilutions of powdered half-skimmed or evapor-

ated whole cow's milk, skimmed or whole lactic acid milk. These formulas contain high protein, moderate carbohydrate and low fat, yielding about 120 calories and 150 cc. fluid per kgm. body weight.

The problems of prematures are always the same but the solutions differ with each era. Today the moderate carbohydrate requirement for normal infants as well as prematures is fulfilled by KARO® Syrup as adequately as a generation ago. Whatever the type of milk adapted to the infant, KARO may be added confidently because it is a balanced mixture of lower sugars resistant to fermentation, non-laxative, easily assimilated and well tolerated by all infants.

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Water	12 oz.
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KARO	1 oz.
Dried milk (half-skimmed)	4 tbsp.
Water	18 oz.
KARO	1 oz.
Feedings: 1½ oz. x 12 x 2 hours	
Measures: 1 oz. KARO = 2 tablespoons	
Caloric values: KARO, 120 per oz.; Cow's milk, 20 per oz.; Evaporated milk, 45 per oz.; Dried milk (½ skimmed), 35 per oz. (Vol.).	
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Adapted from Nelson's Pediatrics, Saunders, Phila. 1954



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IN THE BOOKS



ORTHOPAEDIC SURGERY, EUROPEAN THEATRE OF OPERATIONS, SURGERY IN WORLD WAR II. From the Office of The Surgeon General, Dept. of the Army. Published by Dept. of the Army, Washington, 1956. 397 pages. Prepared under the direction of Major General S. B. Hays.

This volume gives in concise form a review of bone and joint surgery with overseas experiences in the late World War II, which will be of value and interest to the civilian surgeon as well as the military surgeons.

The book is ably edited by Mather Cleveland, M.D., a Senior Consultant in the European Command.

The book is very interesting because it relates many details concerning the administrative and related considerations, as well as clinical policy and practices which many orthopaedic surgeons will want to remember.

The book takes up in detail the orderly management of compound fractures, amputations, post operative complications, rehabilitation and non combat lesions.

There are special considerations given to regional injuries. The book is filled with many statistics which are not tiring but are illustrative of methods of treatment and techniques.

This volume as I remember equals or betters the excellent similar volume following the first World War from the Surgeon General's Office, and will be of value to every orthopaedist as well as traumatic surgeons.

K. Armand Fischer, M.D.

HEALTH FOR THE AMERICAN PEOPLE. From the Massachusetts Memorial Hospital Centennial Celebration. Presented Nov. 21, 1955. Published by Little, Brown and Co., Boston-Toronto, 1956. 105 pages. Price: \$1.

Health for the American People is a symposium presented November 21, 1955 as a part of the centennial celebration at the Massachusetts Memorial Hospital. Twenty-one moderators and participants took part in the discussions. All were identified with medical care and health services of one sort or another and were recognized as authorities in the business of providing prepaid medical services to organized groups, seventeen were physicians and fourteen were not.

The symposium is divided into four panels. (1) Organization of Health Services, (2) Paying for Health Services, (3) Community Action for Health and (4) General Discussion, in which an attempt was made by each of the panelists to summarize his thoughts and harmonize as nearly as possible, his

theories with those of the others. Rather widely divergent opinions were expressed yet thru all was a common thread which seemed to indicate an honest effort to find the most effective and economical means for making available to all the people of any community the best medical services.

The majority of American physicians and the American Medical Association hold to the principle of individual, or group, practice on a fee for service basis. Many of the panelists feel that a more equitable distribution of medical care can be effected by such organizations as the Health Insurance Plan of Greater New York or other smaller plans giving complete hospital, home and office care to the entire community upon the capitation basis of payments.

An analysis of medical services provided by the H.I.P. showed that 78 percent of service was rendered in the physician's office, 10.9 percent in hospitals and 11.1 percent in the patients' homes. A deficiency in present insurance plans was claimed because coverage is directed there principally to hospital care which constitutes a relatively small percentage of total medical care.

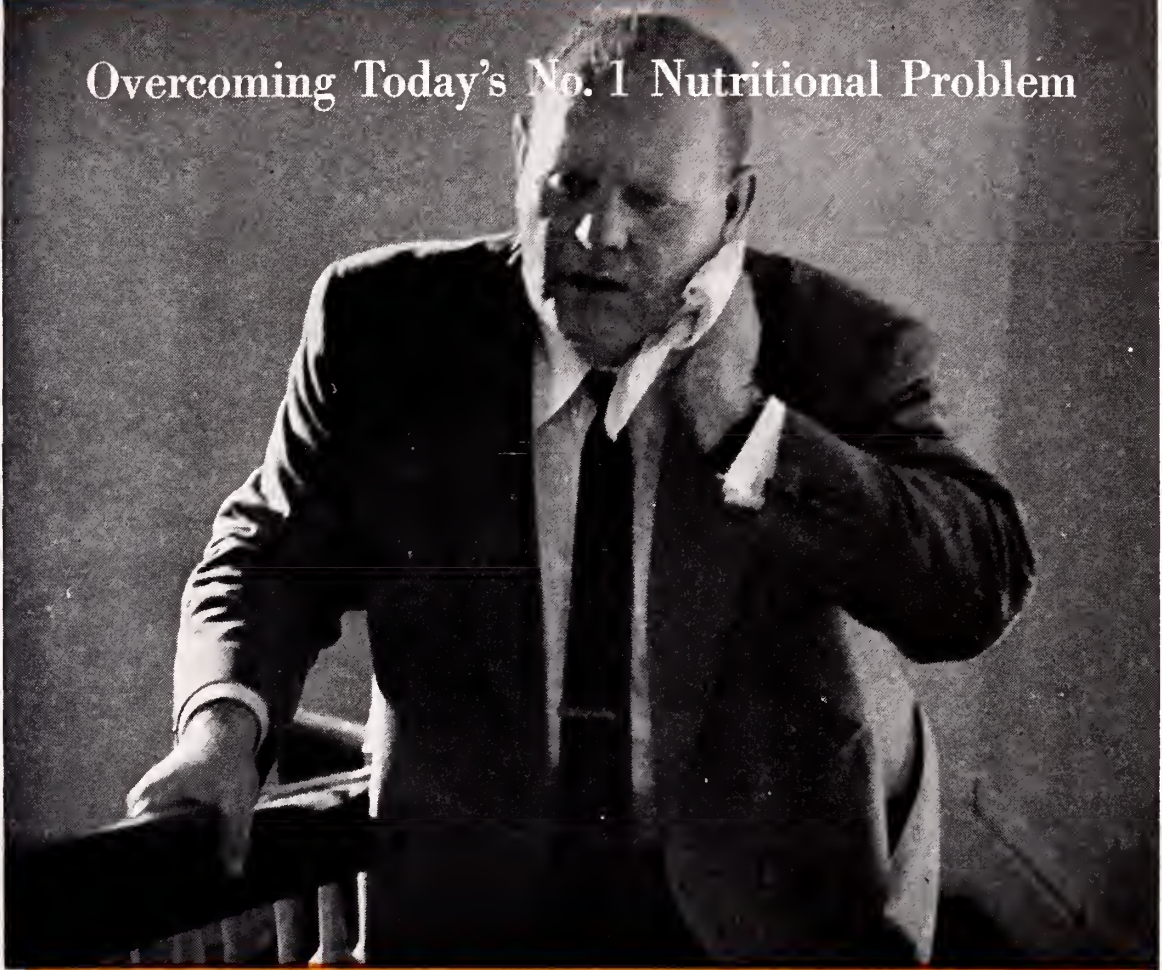
Much was said about the general practitioner, his relation to specialists and groups. Since 47.4 percent of services are provided by him, in an analysis of the H. I. P. of greater New York survey, he is regarded as the most important factor in any schemes for prepaid service. His better training, the preservation of his prestige and provision for compensation commensurate with his work received considerable attention. Any plan allowing the unethical division of fees was regarded as unsatisfactory.

Dr. Donald Clark, medical director Philipps Academy, Andover, Massachusetts, in a general summary said, "It seems to me that the good family physician does not have to worry too much about income. His first concern is to take care of his patients. He expects his specialist consultant to adopt the same attitude, and in my experience over some years I have not seen this fail." This is high and well deserved praise for that large and important class of American physicians and would seem to answer many questions posed concerning fees, ethics and professional morale.

The symposium dealt seriously and honestly with many problems concerning medical care for our population in all classes. It recognized the rapidly changing trends of medical practice and the increasing desire of our people for the best medical care available at a cost within reach of all. It would provide profitable reading for physicians everywhere.

Sam A. Overstreet, M.D.

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1. The Food Exchange Lists referred to are based on material in "Meal Planning with Exchange Lists" prepared by Committees of the American Diabetes Association, Inc., and The American Dietetic Association in cooperation with the Chronic Disease Program, Public Health Service, Department of Health, Education and Welfare.

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SIX MONTHS AGO, when Tom came down with tuberculosis, his friends feared that he would disappear from the world of the well to spend *years* in a hospital.

Those fears might have been justified some time ago. Now, fortunately, when cases like Tom's are discovered early, doctors can often restore good health without the long stay in a hospital, and all the attendant worries about the problems of finances, family and future.

Tuberculosis is still a great problem when diagnosis is delayed and the disease has progressed. But experts agree that medical science has surely gained the upper hand

... through earlier detection, improved surgery and the anti-tuberculosis drugs. These advances have reduced tuberculosis from first to sixth place among the ten leading causes of death.

Obviously, the job is far from ended. Hospitals, universities and research laboratories the world over are searching constantly for more effective medicines of potential value in treating this once-deadly disease.

As a maker of medicines prescribed by physicians, Parke-Davis is proud to be among those engaged in this great, world-wide fight against tuberculosis.

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MAKERS OF MEDICINES SINCE 1866

*Working with your physician, your pharmacist
and your hospital to make modern medical care one
of the most rewarding investments of your life.*

TIME * LIFE * TODAY'S HEALTH * PO



"Tom" had tuberculosis. And in this latest Parke-Davis message on the cost of medical care, "Tom's case" is used as a specific example of the heartening progress being made against sickness and disease.

The ad points out that, thanks to earlier detection, improved surgery and the anti-tuberculosis drugs, tuberculosis has fallen from first to sixth place among the ten leading causes of death.

Unfortunately, most people do not appreciate the priceless value of today's more effective medical care until they come face to face with a dread disease—like "Tom". And that's why, with a colorful new series of advertisements,* Parke-Davis is helping to give your patients a new and clearer understanding of what modern medical care can do for them—in terms of getting them well quicker, back on the job again, and even saving their lives.

In short, we're continuing to tell your patients that prompt and proper medical care may well turn out to be the biggest bargain ever to come their way.

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*Now in eye-catching color in LIFE, TIME,
SATURDAY EVENING POST and TODAY'S HEALTH.*

TIME * LIFE * TODAY'S HEALTH * POST



WASHINGTON NEWS DIGEST



Washington, D. C.—The Army's Office of Dependent Medical Care, handling the new program that offers private medical care to service families, is working on some long- and some short-range plans of importance to state societies.

To meet a problem coming up in the next few months, the office is notifying states that contracts for physicians' services, negotiated through the state societies last fall, will be extended automatically when their expiration date of July 1 arrives. However, there is no definite time period set for any of the extensions; each contract will be continued in effect until that particular state's agreement has been renegotiated.

When the contract is extended, according to Maj. Gen. Paul I. Robinson, head of the Office of Dependent Medical Care, it will be possible to make necessary adjustments, but he hopes not too many changes will be asked at that time.

Then, after July 1, each state will be given 60 days' notification before Defense Department makes its final audit covering the period from December 7, 1956, when the program went into effect, through June 30, 1957. This audit has been promised in each state before renegotiation starts.

Both the state fiscal agents and Gen. Robinson's staff should be well prepared for renegotiations when the time arrives. No renegotiations will be undertaken until January, 1958. They will continue for most of next year, on a tentative schedule that calls for handling about five contracts per month.

Under this tentative arrangement, the contract with the Kentucky State Medical Association will be renegotiated during the month of July 1958.

If any large-scale health and medical program is to be pushed through Congress this year, most of the pushing will be done by the Democrats, who, in control on Capitol Hill, can get what they want, in theory at least.

Announcing that the idea of a special presidential health message had been dropped for this year, Secretary Folsom also said the Republican administration would press for only three major health-medical bills. All three, incidentally, were before Congress last year but were not acted upon. They are:

1. Federal assistance to medical, dental, and public health schools to help them build and equip new teaching facilities or improve and expand existing classrooms or labs.

2. Waiver of the anti-monopoly laws to permit small companies (none doing more than one per cent of the total business) to pool some of their funds for experimental work in expanding voluntary health insurance.

3. Authorization for construction of sanitary facilities on Indian reservations.

In outlining these legislative objectives of the administration, the Secretary took the opportunity to make clear he doesn't think much of one bill that has the ardent support of some Democrats and of some labor leaders. It would have the U. S. pay for 60 days' free hospitalization annually for persons aged 65 and over who are under social security, and their dependents if also over 65.

Mr. Folsom said the social security administration has all it can do administratively to put into effect the major amendments passed last year, and that besides the "hospitalization at 65" plan skirts so close to the area of compulsory health insurance that it should be regarded cautiously.

NOTES:

A House committee, making a survey of the cost of veterans' programs, has been asked by VA Administrator Harvey Higley to ponder this question: Should more VA hospitals be constructed when we know beyond doubt that they will be largely for the benefit of non-service-connected cases?

As anticipated, pressure already is on Congress to drop or lower the age 50 limit for OASI payments because of disability. Many bills have been introduced on the subject.

Congressmen are hearing again from the friends of the "Hoxsey cancer cure," which has been under constant attack by Food and Drug Administration but still manages to stay in business. Form cards, carrying space for a name and address, are being received on Capitol Hill, each asking Congress to investigate FDA for the way that agency has pressured the Hoxsey people.

An addition to the top echelon of the Department of Health, Education, and Welfare is a young (33) assistant to Secretary Folsom, who holds both medical and law degrees. He is Robert H. Hamlin, M.D., of Brookline, Mass. Another HEW addition is John A. Perkins, Ph.D., president of the University of Delaware, the new Under Secretary.

can you read this thermometer,



doctor?

Naturally not. Missing calibration makes it worthless.

Equally useless and dangerous is a "quantitative" urine-sugar test that does not quantitate dependably, or omits readings in the critical range.

Enzyme urine-sugar tests are sensitive and specific for glucose—excellent "yes" or "no" tests but undependable for quantitation. King and Hainline,¹ after testing 1,000 urines, found an enzymatic urine-sugar test unable to distinguish in the important range between $\frac{1}{2}$ per cent and 2 per cent or more of urinary glucose. Leonards,² in a report on 4,020 tests, revealed that "...in 502 out of 804 tests the wrong interpretation was made." He concluded that enzymatic urine-sugar testing "...as a quantitative procedure is unsatisfactory and can lead to serious error in the interpretation of a patient's clinical condition."²

Failure to recognize this limitation of enzyme tests may result in incorrect insulin dosage,² and may lead to diabetic complications.

(1) King, J. W., and Hainline, A., Jr.: Commercial Glucose Oxidase Preparations for the Detection of Glucose in Urine, *Cleveland Clin. Quart.* 23:212, 1956. (2) Leonards, J. R.: Evaluation of Enzyme Tests for Urinary Glucose, *J.A.M.A.* 163:260 (Jan. 26) 1957.

reliable readings throughout the critical range—
does not omit $\frac{3}{4}\%$ (++) and 1% (+++)

color
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CLINITEST[®]
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a 15 year "standard" in urine-sugar testing



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symptomatic relief... plus!

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TETRACYCLINE-ANTIHISTAMINE-ANALGESIC COMPOUND

tablets and syrup

ACHROCIDIN provides early effective therapy for undifferentiated upper respiratory infections, especially in the very young and very aged; nephritics; susceptibles to recurrent middle ear and sinus infections; those with diabetes, chronic pulmonary diseases, bronchial asthma of the infectious type, rheumatoid or rheumatic disorders.

In addition to *rapid symptomatic improvement*, ACHROCIDIN offers *prompt, potent control of the bacterial component* frequently responsible for complications leading to prolonged disability in susceptible individuals.

Adult dosage for ACHROCIDIN Tablets and new, caffeine-free ACHROCIDIN Syrup is two tablets or teaspoonfuls of syrup three or four times daily. Dosage for children according to weight and age.

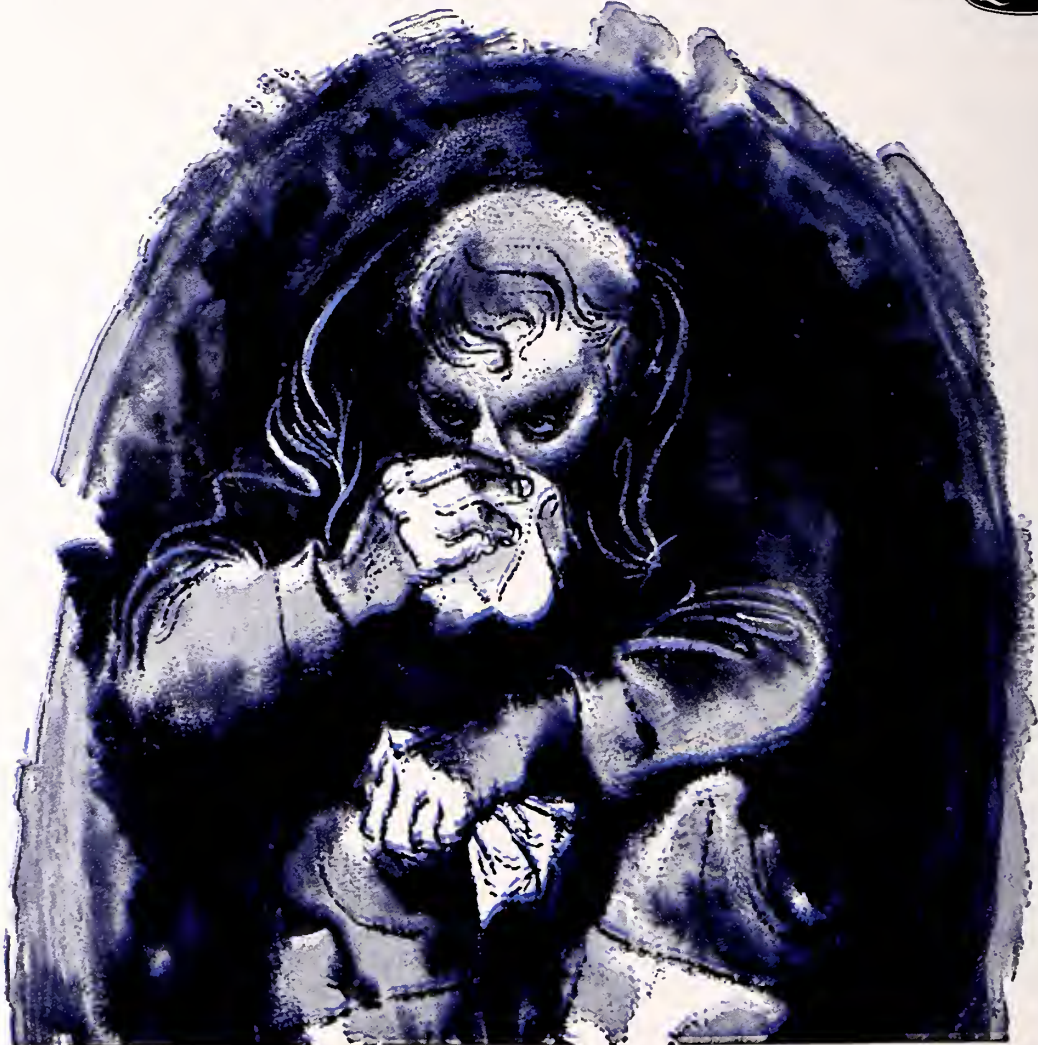
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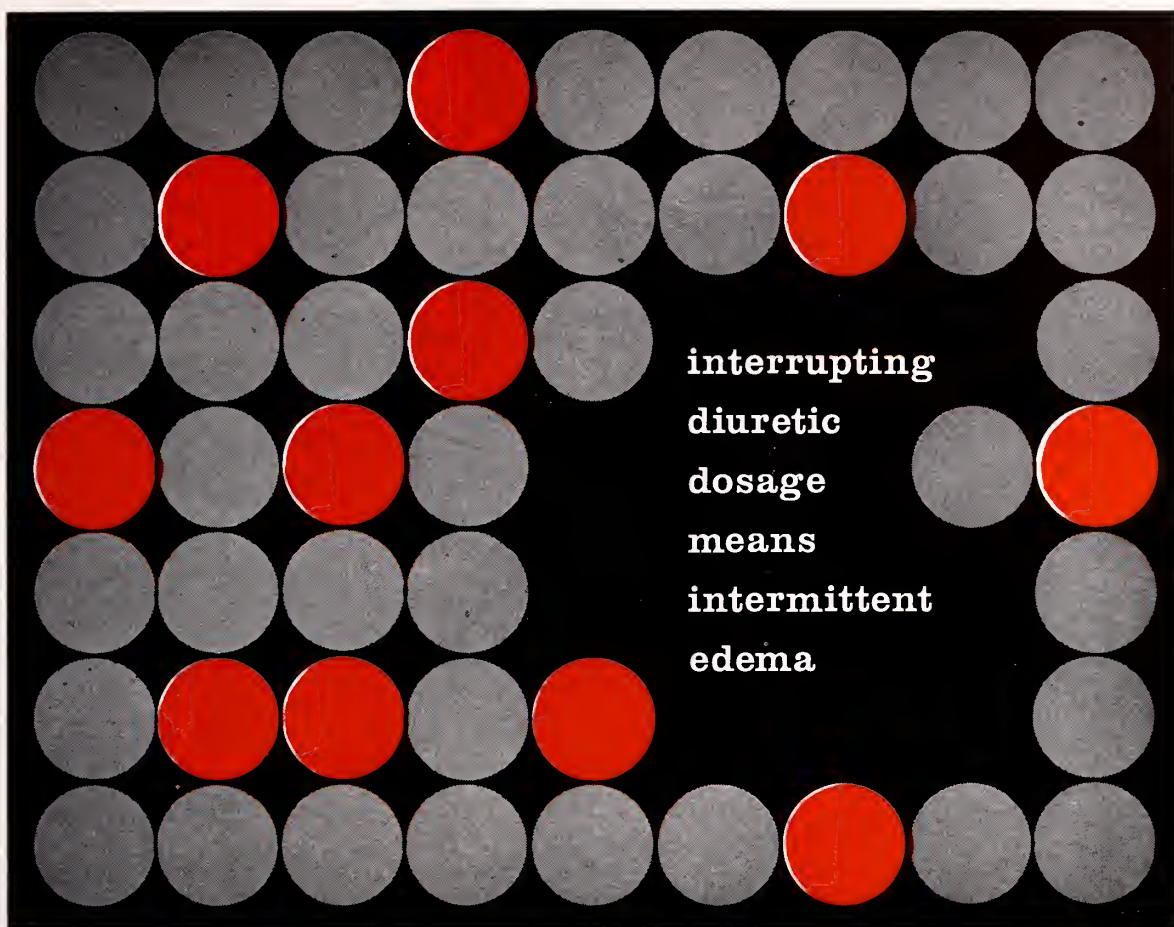
Each tablet contains:

ACHROMYCIN® Tetracycline	125 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
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Chlorothen Citrate	25 mg.

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Diuretics needing "rest periods," whether enforced by dosage restriction to once daily, or by omission to alternate days, inevitably fail to achieve sustained control of edema.

The organomercurials never require interruption of dosage to prevent refractoriness and can maintain patients continuously in the edema-free state.

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NEOHYDRIN

BRAND OF CHLORMERODRIN (16.3 MG. OF 3-CHLORMERCURI-2-METHOXY-PROPYLUREA
EQUIVALENT TO 10 MG. OF NON-IONIC MERCURY IN EACH TABLET)

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**AFTER ALMOST
FIVE YEARS OF
INVESTIGATION
AND EXTENSIVE
CLINICAL USE
(MILLIONS OF
PRESCRIPTIONS)
THERE HAS NOT
BEEN A SINGLE
REPORT OF
A SERIOUS OR
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TO ERYTHROCIN**

This remarkable safety record stands unparalleled in systemic antibiotic therapy today. In addition to being an unusually well-tolerated drug... ERYTHROCIN (compared to most other commonly-used antibiotics) is virtually free of side effects.

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While discussing purulent cellulitis and sepsis due to staphylococci, Eastman, et al., mentioned erythromycin as a *drug of first choice in treating these conditions.*²

Meanwhile, Solomon and Johnston stated, *"in the staphylococcic and streptococcic infections, other than pneumonias, without exception the results of treatment with erythromycin were excellent."*³

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You, too, can have these same good results in your everyday practice—plus the assurance of prescribing a drug proved to be exceptionally well-tolerated in almost five years' use. *Filmstab* ERYTHROCIN Stearate (100 and 250 mg.), in bottles of 25 and 100.



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STEARATE (Erythromycin Stearate, Abbott)

1. Herrell, W. E., Erythromycin, Antibiotics Monographs, No. 1, p. 34, New York, Medical Encyclopedia Inc., 1955. 2. Eastman, G., Cook, E. and Bunn, P., N. Y. State J. Med., 56:241, 1956. 3. Solomon, S. and Johnston, B., Amer. J. Med. Sc., 230:660, 1955.

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RELIEVES DISCOMFORT AND DISABILITY

RELIEVES MUSCLE SPASM

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1. *Prednisolone buffered*—the newest and most potent of the “predni-steroids” for prompt relief of joint pain and arrest of the destructive inflammatory process.

2. *Meprobamate*—the newest and safest of the muscle-relaxant tranquilizers for profound relaxation of skeletal muscle in spasm.

Tolerance to this combination is good because there is little likelihood of sodium retention, potassium depletion or gastric distress with buffered prednisolone, and meprobamate rarely produces significant side effects in therapeutic dosage.

An additional important therapeutic benefit, often overlooked, stems from the tranquilizing action of meprobamate. This component of MEPROLONE relieves mental tension and anxiety so often manifest in arthritics, making them more amenable to other rehabilitation measures.

INDICATIONS: A wide variety of conditions, in which four symptoms predominate: *a*) inflammation *b*) muscle spasm *c*) anxiety and tension *d*) discomfort and disability; i.e., rheumatoid arthritis, rheumatoid spondylitis (Marie-Strümpell disease), Still's disease, psoriatic arthritis, osteo-

Therapeutic benefits of MEPROLONE compared with traditional anti-

	relieves pain	suppresses inflammation	relaxes muscle	eases anxiety	improves well-being
Salicylates	✓	✓			
Muscle relaxants			✓ ¹		
Tranquilizers				✓ ¹	
Steroids	✓	✓			
MEPROLONE	✓	✓	✓	✓	

¹. Meprobamate is the only tranquilizer with muscle-relaxant action.

arthritis, bursitis, synovitis, tenosynovitis, myositis, fibromyositis, neuritis, acute and chronic low back pain, acute and chronic primary and secondary fibrositis and torticollis, intractable asthma, respiratory allergy, allergic and inflammatory eye and skin disorders (as maintenance therapy in disseminated lupus erythematosus, periarteritis nodosa, dermatomyositis and scleroderma).

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**NO OTHER
ANTIRHEUMATIC
PRODUCT
PROVIDES AS MANY
BENEFITS AS**

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MEPRO | **BAMATE**
PREDNISO | **LONE, buffered**

**THE ONLY
ANTIRHEUMATIC,
ANTIARTHRITIC
THAT SIMULTANEOUSLY
RELIEVES:**

- 1. MUSCLE SPASM**
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Delivers a measured dose of true nebular vapor...Dose is always the same regardless of strength of fingers or amount of medication in bottle.

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Riker brand of epinephrine U.S.P. 0.5% solution in inert, nontoxic aerosol vehicle. Each ejection delivers 0.125 mg. epinephrine. In 10 cc. vial with metered-dose valve.

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is also available in Medihaler-Nitro™ (octyl nitrite) for the rapid relief of angina pectoris...and Medihaler-Phen™ (phenylephrine-hydrocortisone-neomycin) for lasting, effective relief of nasal congestion.

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confirm daily in practice
the **overwhelming** evidence
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SPONTANEOUS PNEUMOTHORAX, RESULTS OF PULMONARY RESECTION*

PORTER MAYO, M.D.
Lexington

IN THE PAST several years there has been an increasing unanimity of opinion as to the etiology of spontaneous pneumothorax, but there has been considerable diversity of opinion as regards treatment. Spontaneous pneumothorax occurs more often in young individuals and is reportedly more common in males.¹ These individuals are usually in an apparently good state of health and often the diagnosis is made only by chest x-ray without any history of symptoms.

Etiology

"Several mechanisms operate in the genesis of spontaneous pneumothorax, of which the fundamental appears to be the development of emphysema, sometimes with the additional complication of local dissection into the pleura. The latter has the form of a bleb whose wall consists merely of areolar tissue enclosing a few elastic fibers and covered over by the exceedingly delicate pleural mesothelium. Such emphysematous dissecting lesions may be minute and not associated with generalized changes in the pulmonary substance. Rupture of a vesicle occurs as a result of a rise in pressure within it. This may be the consequence of a "check valve" action of flap-like masses of tissue in the passages, often tortuous and narrow, that connect the vesicle with the proximal respiratory passages. It is remarkable that pneumothorax does not occur more commonly. One important protective mechanism is that of collateral respiration which under normal circumstances provides an alternative pathway of ventilation.

*Presented before Kentucky Chapter, American College of Chest Physicians Sept. 19, 1956, during KSMA Annual Meeting.

At one time the most frequent cause of localized emphysema was considered to be a minor, previously asymptomatic, and even completely healed tuberculous process. At present, since tuberculosis is becoming less frequent, other mechanisms have become relatively more important. Alveolar distention and rupture may be the result of a congenital defect or of a very minor fibrosing process associated with a focus of organizing pneumonia or of a minute organized infarct."²

Further efforts to substantiate the absence of any association of tuberculosis with this process have been made and it is interesting to note that in one group of sixty patients only one had tuberculosis and thirty-five per cent of this same group showed a negative reaction to the tuberculin skin test.³ Only a very small per cent of the patients questioned gave a history of any undue stress or exertion at the time of the occurrence of the pneumothorax. The probable explanation for the persistence of the pneumothorax following the spontaneous rupture of a bleb or bullae is more than likely due to the size of the leak with a concomitant tension state. Also, as is well known, pleural adhesions are frequently present near the surface leak; and act in such a manner as to maintain patency of the leak. It has been shown that by releasing the adhesions and thereby allowing the lung to be free of a state of tension that the surface leaks are thereby able to seal.⁴

Diagnosis

As has been mentioned previously, spontaneous pneumothorax may be discovered on a routine chest x-ray and go undetected otherwise. Most of the cases do present symptoms

which may be minor or fairly severe in nature. It is not necessarily true that the degree of symptoms parallels the amount of collapse. Frequently a sharp chest pain occurs which may be of a very sudden nature and which may gradually disappear to be prolonged for a longer length of time with decreased severity of discomfort. The location of the pain may be anywhere from the shoulder region to the lower limits of the thorax and even in the upper abdomen.

The other symptom of particular significance is that of dyspnea of variable degree. Other manifestations of spontaneous pneumothorax are cough, restlessness, anxiety and fever. As the one extreme may be an absence of symptoms, the other certainly is compatible with a state of shock, especially in those cases in which an associated hemothorax is present and/or when a tension pneumothorax exists. The occurrence of the hemorrhage may be ascertainable at the time of the first examination, however, it is not unusual for the hemorrhage to be delayed from a few hours up to forty-eight hours.⁵ The cause of the bleeding is in all probability the result of fracturing of vascular adhesions as they exist between the visceral and parietal pleura; and when the lung collapse occurs, there is a tearing with subsequent outpouring of blood into the pleural space. Even though this may be a relatively small vascular leak, nevertheless, it is capable of promoting a rather sizable accumulation of blood in the pleural space as there is relatively no opposition exerted to promote its closure.

The diagnosis can usually be established with little difficulty. As long as one keeps in mind the possibility of such an occurrence, it can easily be demonstrated by physical examination and corroborated by x-ray studies. It is not unusual for the patient himself to divulge the fact that he has a collapsed lung inasmuch as he may have had a similar previous experience. Treatment is directed toward the expansion of the lung at the earliest opportunity in order to re-establish a normal physiological state. Any result that does not restore essentially complete expansion is to be condemned inasmuch as the collapse is almost always totally reversible.

Treatment

Measures designed for the treatment are quite variable and to a large extent dependent upon the severity of the symptoms, radiological

interpretation of the degree of collapse, and also, as to whether or not it is the first collapse or a recurrence. Treatment consists of bedrest, the administration of oxygen, and the relief of pain as well as other measures directed toward the alleviation of symptoms. More active treatment consists of elimination of air from the pleural space by needle aspiration and by tube drainage.

Other surgical procedures advocated include the use of the thoracoscope and lysis of adhesions, closed drainage with forceful suction and open thoracotomy. The asymptomatic case is usually treated in an expectant manner and the results are almost always satisfactory. Under this regimen, which consists of bedrest and symptomatic treatment as indicated, there is usually complete expansion of the lung and the patients are almost always ready to return to their usual activity in a short time. In an initial pneumothorax, uncomplicated by effusion, especially one of a hemorrhagic nature, thoracentesis may be resorted to, with expansion of the lung. Thoracenteses will not permit a lung in which there is a sizable leak to re-expand. In this type it is necessary to introduce a catheter into the pleural space for the evacuation of the air and the relief of a tension pneumothorax if present. Those cases in which there is a persistently positive pressure are treated in like manner. In the past there has been considerable use of sclerosing agents as well as the use of thoracoscopy and pneumonolysis. Sterile talc and solutions such as concentrated glucose injected into the pleural space result in pleuritis and adhesion between the visceral and parietal pleura.⁶

The following statement by Lindskog in his text on thoracic surgery expresses the opinion held by most thoracic surgeons at the present time as to the use of open thoracotomy in the treatment of spontaneous pneumothorax. "Cases seen in the first episode of pneumothorax should not be subjected to surgical exploration unless there is an uncontrolled leakage and tension persists several days, or when blood in large amounts continues to accumulate in the pleural cavity. When a definite cyst with patent leaking point can be determined by thoracoscopy, early operation is advised."

"There is a significantly high incidence of recurrence in spontaneous pneumothorax. Further episodes of collapse, either ipsilateral or contralateral, occur in approximately 20% of

cases. Unless there is some compelling contraindication to major surgery, these patients should be treated by thoracotomy with lysis of all adhesions and local excision of any visibly bullous areas whether or not the site of fistula. The parietal pleura should then be abraded mechanically with dry surgical gauze, and the chest closed with intercostal suction drainage. The drains are removed when no further air leaks are demonstrated and total twenty-four hour drainage is less than 50 ml."⁷

MacQuigg, in an address to the Southwestern Surgical Congress in September, 1954, stated the case for early thoracotomy. While most feel that open thoracotomy is indicated for those patients with recurrences, MacQuigg has used this as a primary method of treatment even in those instances unaccompanied by complications.⁸

Gaensler reports a series of cases treated by parietal pleurectomy for recurrent spontaneous pneumothorax. It is his opinion that this represents a new technique which is more likely to yield better results in the treatment of recurrent spontaneous pneumothorax. He states that this technique is applicable for patients in whom local excision is not desirable either because the entire lung surface is apparently normal and no lesions or air leaks can be found or because the lung surface is covered with blebs which would entail the loss of an unjustifiably large amount of functioning lung tissue. He also applies the technique in a small group in which he describes the presence of small cracks in the lung surface with demonstrable bronchopleural communications, but without visible scars and vesicles.⁹

Resection Therapy

The technique of resection therapy which I have used has been that of a standard posterolateral thoracotomy incision with or without the resection of a rib as dictated by the degree of exposure obtained. In a large number of cases one finds pleural blebs and bullae, especially in the apical region, and very frequently it is possible to identify the particular leak which has been responsible for the occurrence of the pneumothorax. The adhesions are of a string-like nature and occasionally prevent complete deflation of the lung, thereby maintaining patency of the air leak. After the lung is freed from the attachments to the parietal pleura, wedge resections and sometimes seg-

mental resections are the procedures of choice. Occasionally one may have to resort to the resection of a lobe, but this is to be avoided if at all possible. If several fairly large blebs are present over the surface, it is wise to incise these blebs and then to suture across with silk to prevent recurrences. The entire surface of the lung and the parietal pleura is then mechanically abraded with gauze.

Parietal pleurectomy is not resorted to in the usual case, but on one occasion I made use of this procedure because of the extensive involvement of the lung from the apex to the base of the lower lobe. I think that it is, perhaps, a wise procedure in the apical region whenever the lung shows areas of minute bleb formation or the presence of alveolar leaks following resection therapy. In order to gain complete expansion, two thoracotomy tubes are introduced into the pleural space and these are connected to underwater drainage bottles and thence to suction. The tubes are left in place usually about five to six days and even longer in some instances if there is incomplete expansion.

Case Reports

CASE No. 1

On September 15, 1955, this patient, a 27-year-old white male, experienced a sudden sharp pain in the right scapular region while riding as a passenger in a car. The pain extended to the lower costal margin anteriorly and posteriorly. Other symptoms were a choking sensation and shortness of breath on exertion. The past history revealed that the patient had experienced three previous episodes of spontaneous pneumothorax on the right side since 1950.

Treatment was rendered by the patient's private physician and consisted of the removal of 1000 cc. of air on the 15th of September and about 1500 cc. on the 17th by thoracentesis. He was transferred to the Central Baptist Hospital in Lexington on September 17, 1955, and prepared for thoracotomy which was performed on the 18th. The lung was found to be free at every place with the exception of the apex and at the costophrenic angle. At the apex the main disease process was evident and consisted of several grape like clusters of emphysematous blebs. A small strand extended from the apex of the conglomeration of blebs to the superior aspect of the pleura. The lung was completely freed and the diseased area resected. This con-

sisted of essentially the entire apical segment. Another smaller area of bleb formation was present on the lower lobe in the oblique fissure and was resected.

Sections confirmed that there was emphysematous dilatation of the mucous glands. There was also some chronic pneumonitis consisting of scar tissue as well as active inflammatory tissue with some fibrous proliferation and leucocytic infiltration. There was no evidence of tuberculosis or fungus disease. The postoperative course was satisfactory and the patient was discharged on the seventh postoperative day.

CASE NO. 2

This 32-year-old white male experienced severe chest pain on the left side while eating breakfast. Difficulty in breathing was almost immediate. The pain extended to the left shoulder region. He was admitted to his local hospital on August 17, 1955, and was transferred to Central Baptist Hospital in Lexington, Kentucky, on the same date.

Definitive treatment at the local hospital had consisted of thoracenteses with the removal of air and about 1500 cc. of blood. Blood count on admission to Central Baptist Hospital was 4.35 million RBC; 13.5 grams Hgb.; 20,200 WBC.

The patient was experiencing increasing difficulty in breathing as well as continual chest pain. Thoracotomy was advised and performed.

On entering the pleural cavity a very large quantity of blood was aspirated. The blood was both bright and dark and measured 1800 cc. Following the evacuation of the blood, there was no further evidence of bleeding of any consequence. However, in the apex just over the route of the subclavian vessel, the pleura had been torn and a small intercostal vessel was continuing to ooze. Control was by suture fixation. Expansion of the lung allowed examination of its surface and the disease was limited to the peripheral part of the apical segment of the upper lobe. This area was emphysematous and contained several small blebs. Following wedge resection of the diseased part, mechanical pleurodesis was performed on all surfaces and two chest tubes inserted for drainage. The postoperative course was satisfactory and the patient was discharged on the ninth postoperative day. The pathological diagnosis was pulmonary emphysema.

CASE NO. 3

This patient was a white female, age 36. She experienced a sudden onset of chest pain posteriorly beneath the right scapula on August 23, 1955. This was followed immediately by dyspnea that was quite severe. The past history revealed a similar episode twelve years ago at which time a diagnosis of pneumonia was made. One other episode occurred six months prior to admission. Two thoracenteses were performed by the patient's private physician who removed 750 cc. of air at the first procedure and 1000 cc. on the second. Examination by fluoroscopy immediately afterward revealed almost complete expansion, but after three hours, 80% collapse was present on the right.

Operative intervention was recommended and thoracotomy was performed on August 26, 1955. The disease process was in the apical segment of the upper lobe on the right. This consisted of a cluster of small emphysematous blebs. Resection of this area was performed and followed by mechanical pleurodesis. Two thoracotomy tubes were inserted into the pleural space. The pathological diagnosis was pneumonitis and emphysema. The patient was discharged on the ninth postoperative day following a satisfactory postoperative course.

CASE NO. 4

On June 17, 1955, this patient, a white female, age 37, had sudden sharp pain in the back below the right scapula, accompanied by shortness of breath. The latter became increasingly severe. She had no cough or hemoptysis. Nausea and vomiting were present. She was admitted to the Good Samaritan Hospital, Lexington, Kentucky, on June 18, 1955, at which time the chest x-ray was interpreted as follows: "Examination of the chest reveals evidence of a pneumothorax on the right. There is a 50% collapse of the lower and middle lobes and about 30% collapse of the upper lobe. An adhesion is noted in the upper area holding the apical portion in contact with the pleura. There appears to be fibro-calcific infiltrations in both apical and infraclavicular regions. No pleural effusion can be noted."

Thoracenteses were performed, but a return to the previous collapse state occurred within a few hours after each procedure. A thoracotomy tube was inserted into the right second anterior interspace on June 19, 1955, with relief of symptoms and marked improvement in the ex-

pansion of the lung. Unfortunately, the tube became occluded within 72 hours and it became necessary to re-insert tubes into the pleural space. An anterior and also a lateral chest tube were inserted and the patient again received relief of symptoms.

Chest x-ray report on June 21, 1955, was as follows: "Re-examination of the chest taken at the bedside after an interval of two days, shows no essential change in the reontgenographic appearance. There continues to be air in the apical and infraclavicular region on the right and in the basilar portion, all of which have the appearance of being probably due to either loculated pockets of air or most likely distorted portions of the lung with cystic changes."

Although this patient denied a history of tuberculosis on the first examination, she later stated that she had been a patient at the Julius Marks Sanatorium, Lexington, in 1945 but left against advice. Treatment during the intervening years was very irregular, consisting of Streptomycin and PAS on different occasions. All laboratory studies at the Good Samaritan Hospital were negative for acid fast bacilli. The patient was discharged on June 29, 1955, to her home to await the culture report relative to the studies for acid fast bacilli.

The patient had a recurrence of the pneumothorax on July 16, 1955, and was re-admitted to the hospital. As an emergency measure, intercostal tube drainage was performed that evening and thoracotomy on July 19, 1955. Numerous emphysematous cyst formations involved all three lobes. In the apex there was considerable hard fibrous disease. As all three lobes were involved, and also, as by x-ray the left lung probably harbored a similar disease process, it was necessary to avoid sacrificing lung tissue. Therefore, the larger cysts were incised and excised as dictated by location and size and closed with 4-0 silk. Mechanical pleurodesis was then performed. Radiographic re-examination of the chest on July 28, 1955, was reported as follows: "The chest still shows the right (lung) to be completely expanded, except in the extreme upper lobe area, where there is either some thickening of the pleura or minimal loculated fluid." The culture was negative for

acid fast bacilli and the patient was discharged on this same date.

Conclusion

This method of therapy has been very rewarding in accomplishing complete expansion and avoiding recurrences. The hospital stay is considerably less than with other methods of surgical treatment. Ambulation is begun on the first or second postoperative day and the hospital stay following the operative procedure is approximately eight days. These findings are in agreement with practically all other thoracic surgeons who have utilized this method of treatment in the care of patients with spontaneous pneumothorax. The applicability of any surgical procedure is, of course, to be determined by the surgeon and judgment is dependent upon the total evaluation for the individual case.

As more cases are treated in this manner, it is becoming increasingly apparent that surgical nonintervention in the recurrent cases and those with complications is to be condemned. Furthermore, measures short of thoracotomy are obviously proving to be a less satisfactory method of treatment. This concept of treatment can be more fully appreciated when one examines the lungs of those cases with recurrent disease. It is also probable that open thoracotomy may be the procedure of choice in an even higher percent of patients with primary pneumothorax if the collapse is of significant degree, even in the absence of complications.

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SURVIVAL FROM CANCER*

HOUSTON W. SHAW, M.D. **

CLARENCE E. CLAUGUS, M.D. **

Louisville

RECENT controversial opinions from various larger cancer clinics throughout the world concerning radical surgery for cancer prompted this investigation concerning the end results of our work here in Louisville.

Our Tumor Clinic was organized soon after the opening of the Nichols' Veterans Administration Hospital in 1946. We have conducted accurate follow-up by personal physician examination in the follow-up clinic of all major cancer for a period of five years and then yearly check by questionnaire. Chest films for those tumors commonly metastasizing there are taken and bone surveys ordered as indicated. Similarly, gastrointestinal cancer is checked by barium studies or sigmoidoscopic examination at six months or yearly intervals.

Mortality

Pack³ has shown in a recent article the trend in mortality rate for cancer in the past 50 years:

In 1900—five per cent of children could be expected to die from cancer

In 1940—12 per cent of children could be expected to die from cancer

In 2000—415,000 deaths may be expected unless the rate is reduced.

^ The marked increase in the number of cancer deaths is due in part to the longer span of life, plus the increase in the population, thus;

1900—13.5 million people over 40 years of age

1920—22.0 million people over 40 years of age

1950—42.5 million people over 40 years of age

Therapy

The plan of therapy at Louisville Veterans Administration Hospital since 1946 has been radical surgery for all cancers not amenable to x-ray therapy. Surgery has been complemented by x-ray or other palliative agents when indicated. Adherence to the principle of wide ex-

cision with regional node dissection en bloc when possible is followed. The general scope of operation will be described under each group. Surgery, at present and in the past, has been the most effective method of therapy. Celsus in the first century A.D., advised exploration and removal. The anatomists Rouviere and Cuneo first described the spread by way of lymphatics and laid the basis for the Miles, Wertheim and Halstead operations.

Material

This preliminary report includes 340 cases of cancer seen at the Louisville Veterans Administration Hospital between 1946 and 1951. All cases are included whether treated or untreated, including many with terminal disease diagnosed by autopsy only. All are proved by biopsy or autopsy. Most of the cases were submitted to the radical surgery as outlined previously in order to obtain the maximum survival. Survival is charted on the three year and five year basis. Follow-up was complete except for one patient.

In this group, survival alone is considered and finally is compared with survival statistics in a group previous to 1946. Before that time, most of the operations as performed today were prohibited by operative mortality. Multiple blood transfusions, preoperative and postoperative nutrition correction, antibiotics and improved anesthesia permit us to perform the radical extirpative procedures with a low operative mortality. Martin¹ in 1951 collected 1450 neck dissections with negligible operative mortality.

Carcinoma of The Tongue

In our series there were 24 cases of carcinoma of the tongue. Three of the group were either negative for metastasis clinically or no positive nodes were found in the operative specimen, while 21 had metastasis. Our plan of operation is a wide local excision alone for small lesions unassociated with clinically positive nodes. Combined one-half tongue, jaw and unilateral neck dissection is used when the lesion is large and extends to the floor of the mouth and/or ipsilateral metastasis is present.

*Published with the permission of Chief Medical Director, Department of Medicine and Surgery, Veterans Administration, who assumes no responsibility for opinions expressed or conclusions drawn by the authors.

*Read before the Kentucky Surgical Society May 19th, 1956.

**From the Department of Surgery, University of Louisville School of Medicine and the Louisville Veterans Administration Hospital.

Contralateral neck dissection is performed only after metastasis occurs.

SURVIVAL RATE FOR CARCINOMA OF THE TONGUE

		3 years	5 years
WITHOUT METASTASIS	3	2 (66%)	1 (33%)
WITH METASTASIS	21	5 (24%)	4 (19%)
TOTAL	24	7 (29%)	5 (20%)

THERAPY

		(terminal or refused treatment)	
INOPERABLE	4		
PALLIATIVE RESECTION	8	0	0
CURATIVE RESECTION	12	7 (58%)	5 (42%)
TOTAL (operated)	20	7 (35%)	5 (25%)

Of this group there were seven patients alive and well three years after operation and five remaining at the end of five years. Only 12 curative resections were performed, giving us a survival rate of fifty-eight per cent three year and forty-two per cent five year. When the palliative resections are included the rate drops to thirty-five per cent and twenty-five per cent.

Carcinoma of The Larynx

There were 18 cases of carcinoma of the intrinsic larynx. Of this group there were 12 with localized lesions and six with metastasis.

The general plan of therapy for carcinoma of the larynx is as follows—

1. If the lesion is confined to one vocal cord without fixation of the arytenoid; radical excision of cord only (laryngo fissure).
2. If there is extension off the cord with fixation of the arytenoid; radical laryngectomy.
3. If unilateral clinical metastasis is present a procedure as in two, above, is performed plus unilateral radical neck dissection. If contra-lateral metastasis occurs a contralateral neck dissection is performed. Prophylactic contralateral neck dissection is performed in certain advanced cases.
4. Inoperable lesions are given palliative x-ray. Recurrences not amenable to surgery are also treated with palliative x-ray.

SURVIVAL RATE FOR CARCINOMA OF THE LARYNX

		3 years	5 years
WITHOUT METASTASIS	12	7 (58%)	6 (50%)
WITH METASTASIS	6	1 (17%)	1 (17%)
TOTAL	18	8 (44%)	7 (39%)

THERAPY

INOPERABLE	0		
PALLIATIVE RESECTION	3	1 (33%)	1 (33%)
CURATIVE RESECTION	15	7 (47%)	6 (40%)
TOTAL	18	8 (44%)	7 (39%)

Of this group of 18 cases eight were living at the end of three years and seven at the end of five years. Six patients with carcinoma confined to the larynx alone were alive after five years while only one with metastasis lived five years.

In the curative resection group, the survivors, 40 per cent remains approximately the same since most of the patients had curative resections.

Carcinoma of The Lung and Bronchus

Cancer of the lung and bronchus composed the largest group of patients in our series. This is, in part, due to many patients being referred to the Veterans Administration Hospital after exploratory operation had been performed elsewhere. Likewise, thoracic surgery is not performed in many of the smaller towns served by our Veterans Administration Hospital so such patients are referred for treatment.

Pneumonectomy with hilar node dissection was used in most cases and occasionally part of the pleura and chest wall was excised. Many of the cases had biopsy only or autopsy, having been diagnosed elsewhere.

SURVIVAL RATE FOR CARCINOMA OF THE LUNG AND BRONCHUS

		3 years	5 years
WITHOUT METASTASIS	28	7 (25%)	5 (18%)
WITH METASTASIS	88	5 (6%)	1 (1%)
TOTAL	116	12 (10%)	6 (5%)

THERAPY

INOPERABLE	85 (73%)	3 (3%)	
PALLIATIVE RESECTION	13	2 (15%)	1 (8%)
CURATIVE RESECTION	18	7 (39%)	5 (28%)
TOTAL (resected)	31	9 (29%)	6 (19%)

From the above we can see that only twelve (10 per cent) were living at the end of three years. Six more died during the next two years, leaving only six (5 per cent) five year survivals.

In the curative resection group of 18 the 39 per cent three year and 28 per cent five year survival gives us encouragement in continuing the operation. However, if it is necessary to do a palliative resection, one questions the value since only one patient lived five years.

Exploratory thoracotomy to determine operability carries a negligible mortality and is a mandatory procedure in any questionable lung lesion.

Only one patient with metastasis lived five years and he was dead two months later.

Carcinoma of The Esophagus

There were 29 patients with carcinoma of the esophagus. Of this group 13 had the lesion confined to the organ while 16 had metastasis.

The general plan of therapy is wide excision of the lesion. As is well known, pain due to perineural lymphatic spread, so common in esophageal cancer, appears many times as the first symptom of the disease. This defeats any type of therapy for cure to date.

SURVIVAL RATE FOR CARCINOMA OF THE ESOPHAGUS

		3 years	5 years
WITHOUT METASTASIS	13	1 (8%)	1 (8%)
WITH METASTASIS	16	1 (6%)	0 (0%)*
TOTAL	29	2 (7%)	1 (3%)

*The other three year survival lived four years and eleven months.

THERAPY

INOPERABLE OR CLOSED	17		
PALLIATIVE	8	(average survival 4.4 months)	
CURE	4	2 (50%)	1 (25%)
TOTAL (operated)	12	2 (20%)	1 (8%)

Of the group of 29 cases only two (seven per cent) lived three years and one (three per cent) is still living after being operated on in 1948.

Our group of cases approximates that of Resano¹ in that of 319 cases, only four were living after seven to nine years. One series reported by Buschke¹ included a group of selected cases without apparent metastasis and aim to cure.

Surgery 3.3% five year survival

X-ray 6.2% five year survival

The four patients that were operated on for cure gave us a 50 per cent three year and a 25 per cent five year survival. We still believe with Sweet¹ that surgery is the treatment of choice for palliation and a try at cure. Morbidity following resection is certainly reduced from other methods.

Carcinoma of The Stomach

There were 37 cases of malignancy of the stomach including 10 lesions confined to the stomach. Twenty-seven had metastasized.

The general plan of therapy attempted is radical subtotal resection (small fundus pouch) with excision of the gastro-hepatic and great omentum in the dissection. Invasion of the cardia necessitates total gastrectomy and several specimens include spleen, transverse colon and tail of the pancreas. One unusual survival included these together with a portion of the

diaphragm which showed microscopic evidence of invasion.

The lymphatic drainage of the stomach to the coeliac nodes and portal vein defeats any operation on the stomach. One cannot do en bloc resection of these vital organs and thus all operations for metastatic cancer of the stomach unless accidentally resected when surgery is for ulcer, is palliative to date.

SURVIVAL RATE FOR CARCINOMA OF THE STOMACH

		3 years	5 years
WITHOUT METASTASIS	10*	4 (40%)	1 (10%)
WITH METASTASIS	27	1 (4%)	1 (4%)
TOTAL	37	5 (13%)	2 (5%)

* (1) Suicide after 4 years.

THERAPY

INOPERABLE	18		
PALLIATIVE	7	1 (14%)	1 (14%)
FOR CURE	12	4 (33%)	1 (8%)
TOTAL (operated)	19	5 (26%)	2 (10%)

The above shows that out of 10 patients with carcinoma of the stomach confined to the organ four were living after three years and only one survived five.

Patients with metastasis proved the relative hopelessness of the operative procedure. Of the group living three and on to five years, one patient was cured.

The total survival then is 13 per cent three year and 5 per cent five year.

The curative operation group of 12 operations again demonstrates that only 33 per cent three year and 8 per cent five year survivals can be obtained.

Our results compare favorably with other reported series of resections. Mayo¹ reports the following series from 1940-1949. There were 80 laparotomies and 44 resections. The overall five year survival for those operated on was 17 per cent while the total for each 100 cases examined was 14 per cent.

Hines Hospital¹ figures for 1931 - 1947 agree with ours in that there were only four patients living at the end of five years out of each 100 carcinomas.

The series from the Mayo Clinic indicates that our present more radical approach to the problem leads to no improvement in the number of survivors in advanced cases.

Carcinoma of The Pancreas

This group of patients included 18 that we followed for five years. All of the group showed metastasis at operation and none lived for three years. There were three other cases not proved

since no biopsy was taken but all of these were dead in less than one year.

The standard operation employed is radical resection of the head of the pancreas with gastro-duodenectomy. Reconstruction includes a Roux-Y choledcho-jejunostomy, pancreatico-jejunostomy, and gastro-jejunostomy. We hope to add a superior mesenteric vein graft if indicated.

SURVIVAL RATE FOR CARCINOMA OF THE PANCREAS			
		3 years	5 years
WITH METASTASIS	18		
WITHOUT METASTASIS	0	All Dead	
TOTAL	18		
THERAPY			
INOPERABLE	8		
PALLIATIVE	7	All Dead	
CURATIVE RESECTION	3		
TOTAL (operated)	10		

Such poor results, undoubtedly due to the perineural lymphatic spread, have not changed our attitude toward radical resection of the organ if the portal or superior mesenteric veins are not invaded. The morbidity following the surgery is certainly no worse than that following palliative surgery. Recent statistics state that there are now 12 humans living more than five years following resection. The addition of portal or superior mesenteric vein grafts may salvage a few more cases. As in the stomach, the anatomical relations of the organ prohibits an en bloc resection with our present available surgical armamentarium. The operative mortality rate of 7.3 per cent proves the operation justified since death is inevitable otherwise.

Carcinoma of The Colon

We saw 41 patients with this disease during the period.

The scope of operation employed in our resection follows the basic principle of ligating the arterial and venous supply as near their point of origin as is compatible with viability of the remaining intestine. The mesentery together with the involved segment is resected en bloc. The principle of removing all the mesenteric nodes which may be involved and then determining the viability of the remainder of the bowel is practiced.

SURVIVAL RATE FOR ADENO—CARCINOMA OF THE COLON TO			
	RECTUM	3 years	5 years
WITHOUT METASTASIS	7	4 (57%)	1 (14%)
WITH METASTASIS	34	6 (18%)	5 (15%)
TOTAL	41	10 (25%)	6 (15%)

THERAPY			
INOPERABLE	6		
PALLIATIVE	18		
CURE	17	10 (59%)	6 (35%)
TOTAL (resected)	35	10 (28%)	6 (17%)

This small group of 41 patients with carcinoma of the colon included seven with the lesion confined to the bowel alone while 34 had metastasis.

Ten patients (25 per cent) survived three years but another two years lowered the percentage to (15 per cent,) or six patients.

Seventeen were operated on for cure and gave us reason for continuing the operation. Fifty-nine per cent of the group lived three years and 35 per cent lived for five years.

Carcinoma of The Rectum

Fifty-seven patients with carcinoma of the rectum were seen and followed. Twenty-six lesions were confined to the rectum while 31 had metastasis.

Abdomino-perineal resection with ligation of the inferior mesenteric artery at its origin on the aorta is our standard operating procedure for rectal carcinoma. Sphincter saving operations are not employed when there is a positive biopsy of carcinoma.

SURVIVAL RATE FOR CARCINOMA OF THE RECTUM			
		3 years	5 years
WITHOUT METASTASIS	26	23 (88%)	16 (61%)
WITH METASTASIS	31	4 (13%)	1 (3%)
TOTAL	57	27 (47%)	17 (29%)
THERAPY			
INOPERABLE OR REFUSED	12	1 (8%)	0
PALLIATIVE RESECTION	8	0	0
CURATIVE RESECTION	37	26 (68%)	17 (46%)
TOTAL (operated)	45	27 (60%)	17 (38%)

Twenty-seven lived three years (47 per cent) and 17 were living at the end of five years (29 per cent).

Thirty-seven patients were operated on for cure and we see a good 68 per cent three year and 46 per cent five year survival.

An interesting review of all cases of carcinoma of the rectum in Connecticut from 1935 - 1945 by Ottenheimer¹ showed that five year survival rates could vary from eight per cent to 35 per cent depending on the factors considered in the calculations. If all cases were included there were eight per cent living without disease. If selected cases of resection survivors without distant metastasis were used, there were 35 per cent living at the end of five years.

Summary

Three hundred and forty cases of proved carcinoma were followed for a period of five

years with the following three year and five year survival statistics:

SURVEY OF SURVIVAL (A) 340 CASES

		PREVIOUS ERA		
		3 years	5 years	5 years
CARCINOMA TONGUE	24	7 (29%)	5 (20%)	23%*
CURATIVE RESECTION CARCINOMA LARYNX	12	7 (58%)	5 (42%)	X-Ray only
	18	8 (44%)	7 (39%)	29% (under)
CURATIVE RESECTION CARCINOMA LUNG AND BRONCHUS	15	7 (47%)	6 (40%)	X-Ray only
	116	12 (10%)	6 (5%)	10% (under)
CURATIVE RESECTION	31	7 (23%)	5 (16%)	

SURVEY OF SURVIVAL (B)

		PREVIOUS ERA		
		3 years	5 years	5 years
CARCINOMA ESOPHAGUS	29	2 (7%)	1 (3%)	
CURATIVE RESECTION	4	2 (50%)	1 (25%)	X-Ray only 6% selected
CARCINOMA STOMACH	37	5 (13%)	2 (5%)	4%
CURATIVE RESECTION CARCINOMA PANCREAS	12	4 (33%)	1 (8%)	
	18	All Dead		Occasional
CURATIVE RESECTION	3	All Dead		patient

SURVEY OF SURVIVAL (C)

		PREVIOUS ERA		
		3 years	5 years	5 years
CARCINOMA COLON	41	10 (25%)	6 (15%)	26%
CURATIVE RESECTION CARCINOMA RECTUM	17	10 (59%)	6 (35%)	
	57	27 (47%)	17 (29%)	8%
CURATIVE RESECTION	37	26 (68%)	17 (46%)	

Our overall five year survival rate previous to 1945 shows no improvement in carcinoma of the tongue although these cases treated by x-ray were classified as localized to the anterior two-thirds. This lesion is the one most amenable to either surgery or x-ray therapy. We believe that the unilateral lesion should have the complete "commando" operation since microscopic metastasis is removed en bloc. The curative group with 42 per cent five year survival is encouraging.

Laryngeal carcinoma (laryngo-hypopharynx excluded) treated by x-ray only previous to 1945 showed the 29 per cent five year survival. This group included 593 cases quoted by

Ackerman and was the absolute five year survival.

Our curative figure of 40 per cent shows improvement from surgery. Here again, we believe that surgery is the best method of therapy in order to excise the regional microscopic lymphatic metastasis.

Carcinoma of the lung and bronchus showed less than 10 per cent absolute five year survival before 1945. Our curative figure of 28 per cent improves that discouraging figure. Exploratory thoracotomy (early) for any suspicious lung pathology offers us some hope for improvement.

Carcinoma of the esophagus of selected cases treated by x-ray only shows six per cent survival. Our one surgical patient living five years again illustrates the poor results with surgery. We continue to resect every lesion, since the morbidity apparently is much less than those previously treated with indwelling tubes and x-ray.

We have shown no improvement in absolute five year survival in carcinoma of the stomach. The four per cent reported previously was an absolute rate. We are hoping that the addition of the small or large intestinal artificial stomach to the surgical armamentarium may salvage a few more. A total gastrectomy, then, could be done without the present morbidity.

We continue to resect carcinoma of the pancreas although none have lived very long. Our method was previously stated, in which en bloc resection was impossible.

Carcinoma of the colon excluding the rectum has shown little improvement. The 26 per cent reported previously included a group of operated cases and we raised the rate to only 35 per cent in a small series.

Twenty-nine per cent five year survival in rectal carcinoma shows definite improvement when all cases are considered. The en bloc node dissection possible here undoubtedly accounts for our 46 per cent in the curative group. Removal of portions of invaded bladder, uterus, etc., may likewise offer a chance of improvement.

In conclusion, radical surgery offers the best chance for survival with lower morbidity.

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SOME REMAINING CONTROVERSIES IN BILIARY TRACT SURGERY*

RALPH BOWERS, M.D.

Memphis, Tennessee

Selection of Cases

ALTHOUGH the point of perfection has not been reached, the known facts about the ability of surgery to cure in diseases of the biliary tract are such that indeed violations of the principles attending these facts are the real causes for most failures. Like all other surgical conditions, there are phases of the diseases of this important system when surgery will not achieve good results. Obviously, if the operations are performed on these patients, poor results will follow.

Space is too limited to present all points attending this controversy, but a good, successful working plan can be moulded after the following simple formula:

- (1) Proper gallstone symptomatology + stones + proper surgery = good results.
- (2) Improper gallstone symptomatology + stones + proper surgery = poor results.
- (3) Proper gallstone symptomatology + stones + improper surgery = poor, if not disastrous results.

This simply means that well studied and properly selected cases will get good results. One must not yield to the temptation of performing cholecystectomy merely because the roentgenogram shows gallstones, except in those few cases when prophylactic cholecystectomy is employed. The patient and his family must clearly understand this before operation. For example, I remember an instance in New York when a chief surgeon's young favorite was selected by the chief to perform cholecystectomy upon his wife. The younger surgeon, aiming to please and at the same time show the chief something about cholecystectomy skill, performed the operation brilliantly in 45 minutes—but he did not know that the first assistant's hand was pressing upon a carcinoma of the pylorus while that assistant maintained exposure for the cholecystectomy. This was found a few months later, when a senior colleague of the chief surgeon reoperated and

found hopeless carcinoma of the stomach, which shortly killed the chief's wife. Then the surgeon reviewed the symptomatology of the carcinoma, which was manifested by slight loss of appetite and weight and slight anemia. There was no pain and no indigestion typical of gallstones, which were silent in this case. A second mistake involved the fact that the favorite young surgeon did not explore the abdomen, even though the symptoms were not typical of gallstones. A good custom certainly is to explore the abdomen thoroughly, but with dispatch, before making the decision to cholecystectomy the patient. Besides malignant neoplasms, there are other conditions which may simulate the symptoms of gallbladder disease, such as diverticulitis, partial intestinal obstruction, peptic ulcer, superior mesenteric vessel pressure upon the duodenum, pancreatitis, hepatitis, high-riding appendicitis, Meckel's diverticulum, aneurysms of the hepatic, splenic or pancreatoduodenal arteries and diaphragmatic hernia.

The non-calculous gallbladder should rarely be removed unless there is acute infection or marked cholesterosis (strawberry gallbladder). Non-visualization of the gallbladder does not in itself mean pathology in the gallbladder. Non-visualization follows in hepatitis and other diseases of the liver, which cause hepatic insufficiency, when vomiting or diarrhea are sufficient to prevent proper absorption of the dye, when pyloric or partial intestinal obstruction is present, and when the patient tosses the pills away! When the test is perfectly executed, and the patient's history, physical examination and other elimination studies are negative, then the ordinary non-visualization should be extremely reliable in directing the course of action. However, it may be wise in many cases to repeat the test with double dose or with one of the intravenous dyes. The intravenous dyes have not been very helpful to us. As a matter of fact, we are quite discouraged about their use. It would be a particularly helpful test if the gallbladder had previously been removed.

One cannot blindly remove the gallbladder

*From the Surgical Service, Veterans Administration Medical Teaching Group Hospital, Memphis 15, Tennessee.

at operation just because the X-ray shows non-visualization. Cholecystectomy in this instance must be performed after weighing all the clinical pros and cons and the findings of a careful, searching abdominal exploration. That is not all, because other pathology may be found and if so, the surgeon must then use supreme judgment as to his behavior, which must be a case-by-case individual study, and not a communal affair.

Unquestionably, this non-visualization X-ray test has been employed by less conscientious surgeons for the purpose of convincing the patient that he should submit to an unnecessary and illadvised operation. Ignorance exists, of course, but I doubt that ignorance is the cause of the recklessness. So many times the patient has been persuaded, briefed and oriented for cholecystectomy, and fortunately seeks out a second surgeon or group of physicians for the operation, where a second X-ray reveals a beautifully-visualized normal gallbladder on the first test. This, unfortunately, occurs more often than we would like to admit.

Treatment of Acute Cholecystitis

It is difficult for me to understand why this point remains controversial. The pathological events are well known. The attack usually starts with impaction of a stone in the cystic duct, which obstructs inflow and outflow of bile from the gallbladder. About five per cent of the acute cases are not associated with stones, but the duct is probably obstructed by infection. Infection is always present with stones and the obstruction creates a stasis of bile and mucus, apparently a favorable situation for bacterial growth. If the stone disengages, it usually returns to the gallbladder, and the attack promptly subsides. Rarely stones will pass into the common duct. If the stones remain engaged, then the gallbladder enlarges, unless the fibrosis is so dense that the gallbladder cannot expand (Courvoisier's Law), the contained bile loses pigment, pus may accumulate, necrosis of the wall ensues with perforation into the free peritoneal cavity, producing the extremely dangerous but rare bile peritonitis; or more commonly, the gallbladder perforates and localizes as a pericholecystic abscess or subhepatic abscess. From here, liver abscesses, pylephlebitis, septicemia and death may occur. At the same time the patient, as well as his right diaphragm, is usually fixed,

which courts atelectasis, pneumonia, ascites and pulmonary edema, which now contribute heavily to the score of serious maladies present in the patient with acute cholecystitis.

Early cholecystectomy¹, which is usually made easy by the presence of subserosal edema, is the treatment of choice, and is probably achieving more popularity as time passes. Those who delay operation desire to permit the acute infection to subside, which (they think) permits easier surgical handling—but they have not sensed the delights of the easier manipulation in early acute cholecystitis. It may be that after four days or longer, the operation may be more difficult, but we can hardly term that “early acute.”

Second, an occasional cholecystostomy must be done in either event, and is not a shameful thing if needed.

Third, in the delayed group, there are cases when the fever, white count, tenderness and symptoms return to normal, but when the surgeon finally operates, the induration, fibrosis and vascularity are as bad or nearly as bad as in the acute days of the disease. Here, the benefits from the cooling-down process are not gained, and the patient has been subjected to the risks of the added morbidity.

Fourth, infra- or supra- diaphragmatic complications may occur, and force the hand for surgical intervention when the situation is technically much worse than in the earlier days. If the patient is fortunate enough to survive, longer periods of invalidism must be endured.

Increased Mortality for Gallbladder Surgery?

There are simply two points to consider in this discussion. First, Glenn², as well as numerous other students of the subject, shows by statistical analysis that deaths in gallbladder surgery are largely due to associated diseases of the lungs, cardiovascular system, liver and kidneys. This, of course, is best observed when biliary surgery is urgently needed in elderly patients, provided the surgery is skillfully performed. The mortality rate should be in the neighborhood of one per cent. A study of the cases at Kennedy Hospital from July 1, 1946 to March 1, 1955 (See Table I) shows seven deaths in 408 cholecystectomies and four cholecystostomies. There was one “medically treated” death, an elderly, acute cholecystitis

KENNEDY HOSPITAL

CHOLECYSTECTOMIES	408
CHOLECYSTOSTOMIES	4
TOTAL	412
POSTOPERATIVE CHOLECYSTECTOMY DEATHS	7
SURGICAL MORTALITY RATE	1.7%
ONE DEATH "TREATED MEDICALLY"	

Table I

patient who was considered too ill to receive early biliary surgery, was therefore conservatively treated and died because of bile peritonitis. There was only one death due to technical fault. (See Table II). Bleeding esophageal varices caused the death of two patients; pulmonary embolus in one and perhaps another; the lower nephron syndrome and cardiac failure caused the remaining deaths. Age contributed heavily. There was one 83-year-old patient, one 57-year-old patient, and five patients in the early sixties.

PT	AGE	DURATION OF STONES	OPERATION	CAUSE OF DEATH	COMMENT
C S	65	UNKNOWN	CHOLECYSTECTOMY	ESOPHAGEAL VARICES, 10TH POST OP DAY	CIRRHOSIS, BRONCHOPNEUMONIA, SEVERE HEMORRHAGE
M S	63	SEVERE PAIN, 13 MONTHS	CHOLECYSTECTOMY, EXPLORATION COMMON DUCT	ESOPHAGEAL VARICES, 10TH POST OP DAY	MASSIVE HEMORRHAGE
L G	64	15 YEARS	CHOLECYSTECTOMY, SPINCTEROTOMY	8TH POST OP DAY	TECHNICAL DIFFICULTY QUESTIONED
R A	64	2 YEARS	CHOLECYSTECTOMY, EXPLORATION COMMON DUCT	UNKNOWN CAUSE, 7TH POST OP DAY	LOWER NEPHROSIS, PNEUMONIA
T M	83	20 YEARS	CHOLECYSTECTOMY	PULMONARY EMBOLUS OR CORONARY DISEASE	SUDDEN DEATH, NO AUTOPSY
G G	62	5 YEARS	CHOLECYSTECTOMY, CHOLEDOCHOSTOMY	PULMONARY EMBOLUS 1/2 HOUR P.O.	AUTOPSY
J S	57	CHRONIC CHOLECYSTITIS WITHOUT STONES	CHOLECYSTECTOMY	2ND POST OP DAY AURICULAR FIBRILLATION, ... CARDIAC DEATH?	

Table II

A point of great interest, however, and perhaps the main contributor, is the number of years that the patient was known to have gallstones. Physicians had known that five of these seven dead patients had gallstones from 13 months to 20 years, yet these patients were not advised to have them removed earlier when surgery could probably have been easily tolerated. It stands to reason that the younger patient, if he is physically sound, will tolerate the operation with much more safety. No surgeon will doubt this.

A second point involves the choice of action in the so-called silent stone. Many years ago I believed, along with others, that the silence would be maintained even if the patient lived a lengthy life, and that the risk of operation would not therefore be warranted if performed earlier. Some question the silence, and say that if the stone were silent, then why was an X-ray taken? The answer is a simple one. The patient is X-rayed following an accident, or for kidney

disease, or for one of the many unassociated conditions requiring a scout film of the abdomen, and the stone is inadvertently encountered. It has been our experience that if these patients live long enough, gallbladder attacks, acute cholecystitis, common duct stone or associated pancreatitis will appear in the majority of them. It therefore poses a problem for prevention of trouble, and it is correctly argued that a mortality rate of one per cent is low enough to justify this prophylaxis. But, it must be done with the proper instructions to a patient. The reasons are very much the same as for repair of a non-strangulated hernia, or the adjustment of one's dental apparatus. These things are done to keep trouble away, and certainly will pay. The operation must be done only if the patient's health otherwise would permit it, and at a time propitious in the life of a patient. For instance, it should not be performed during a mental depression, or while the patient is being treated for active tuberculosis, until these conditions have first been corrected. Obviously, each case must be handled as an individual problem.

If then, as the age of the population lengthens, and the ease of diagnosis of the presence of gallstones betters, the elderly patient, fragile with the deteriorating conditions of his late years, should not require biliary surgery unless the biliary disease appears only in his late years. Our experience reveals the opposite. If gallstones are known to be present, but the examining physician either does not advise cholecystectomy or does so with no enthusiasm, or dampens the patient's enthusiasm about the procedure, delay ensues until real trouble appears, and then a much more risky operation is performed.

My opinion is based on the simple observation that the older patients are the ones who die. Unfortunately, these old people do get into trouble with their stones, although earlier no troubles were present. Also, we know that perforation of the gallbladder occurs faster and easier in the diabetic, arteriosclerotic, cardiac or any other condition where ischemia is easily induced.

If a physician fails to advise his young gallstone patients to undergo cholecystectomy while they are young, then this same physician should be held responsible for the death, when excellent surgery in good hands cannot bring this now aged gallbladder sufferer through a dangerous acute cholecystitis, or chronic chole-

cystitis which now invokes pain and indigestion to the point of malnutrition or common duct complication.

If the mortality is elevated as the geriatric numbers increase, it will be due to the non-biliary infirmities of age or the failure of the physician who knew of the stones to advise his patient properly. Unless these patients undergo cholecystectomies or whatever biliary surgery is needed while they are young, it is conceivable that we may experience a higher mortality rate.

Technical

One can almost dismiss this controversy by stating that the skilled surgeon rarely gets into serious difficulty. The most serious technical defect is the undesired transection or ligation of the common duct. This produces common duct stricture, for which there is no easy cure even in the best hands. Obviously then, "no common duct injury" should be the working principle. We teach residents at Kennedy Hospital that cholecystectomy is ostensibly a common duct dissection, because if the common duct is clearly defined by neat and orderly dissection, then only an idiot should cut it or ligate it. I have seen the common duct cut only once by a skilled surgeon, unless it was cut for the purpose of common duct exploration or purposely for choledochal-enteric transplant, etc. Anyone can remove the gallbladder if the common duct and cystic artery and duct are properly outlined. Other faults include too long a cystic duct, which permits formation of stones there; ligation of hepatic artery; pancreatic injury; ligation or injury to the right hepatic vessels and ducts, and narrowing of the common duct lumen without true stricture formation.

The best treatment for common duct stricture is "not to have any." The technical errors are largely due to lack of skill, which of course includes recklessness.

Nothing should be clamped or ligated blindly. In case of bleeding of unknown source, do not throw clamps blindly or wildly. Use pressure, or packs, or elevate the common duct with the finger in the foramen of Winslow; thus slow the bleeding until control without pertinent injury to any important structure can be accurately obtained, even if considerable time is utilized in accomplishing this control.

Several months ago, I performed a chole-

cystectomy for a class of surgeons in a post-graduate course in a neighboring large city. It was a difficult cholecystectomy in a 72-year-old man with pancreatitis. After gaining exposure, about one-half hour of operating time was employed to define the common duct above and below the entrance of the cystic duct. During the common duct dissection, there were several queries about why I didn't tackle the gallbladder instead of the common duct. Obviously, these surgeons did not employ the important safety measure of clearly defining the common duct and the cystic duct before placing a clamp upon the cystic duct. It matters not whether the gallbladder is removed "top down" or "bottom up;" the common duct must not be injured in either method.

Role of Biliary Surgery in Certain Pancreatic Lesions

The final controversy for consideration today concerns the part biliary tract surgery plays in pancreatic lesions. Practically, it means treatment for pancreatitis and tumors, particularly malignant tumors located in the head of the pancreas.

There is undoubted association between pancreatitis and gallstones. One observes the presence of gallstones in about 65 per cent of the cases of chronic pancreatitis. Acute pancreatitis, if diagnosed, is properly treated today conservatively and mainly medically. If, however, inadvertent laparotomy has been performed, or the surgeon enters the abdomen for planned surgical attack, cholecystostomy, cholecystectomy, common duct stone removal or common duct drainage may be performed according to the findings and the general physical state of the patient. A good rule would be to do very little and get out as soon as possible. A few have advocated cholecystostomy for all cases of acute pancreatitis, but the present reports do not suggest the need of operation often. Certainly conservative therapy is yielding very good results with low mortality rates.

However, in chronic relapsing pancreatitis, biliary tract surgery may indeed be important. If gallstones are present, we should choose a time when the acute phase has subsided, and perform cholecystectomy, and in most cases explore the common duct, remove common duct stones if any are present, dilate the sphincter of Oddi with Bakes dilators and insert a T-tube, which is permitted to remain in

the duct for a period of about three months. Some believe that as many as 90 per cent of the chronic pancreatitis patients can be relieved by gallbladder surgery, although this seems too high as far as our experience indicates. We believe the figure is somewhere in the neighborhood of 50 per cent. Nevertheless, medical therapy does not control chronic pancreatitis, and the first surgical effort should be that described above. Doubilet and Mulholland³ include sphincterotomy with the biliary tract surgery, and that certainly controls a few more patients than biliary surgery alone. Most operations employed for the control of pancreatitis involve the prevention of bile regurgitation into the pancreatic duct under pressure, or some unknown happening to the bile which lights up the pancreatitis. We have successfully employed choledochojunostomy in 18 out of 19 cases. The one failure received great benefit, but not total control. The operation completely transplants the common duct in such fashion that the bile cannot possibly enter the pancreatic duct.⁴ We believe that choledochojunostomy will control more patients than the sphincterotomy.

Carcinoma of the head of the pancreas causes obstructive jaundice, which must be relieved. The question today is: Should a palliative and lesser operative procedure—usually cholecystjejunostomy with or without a defunctioned loop—be done for all cases, or should pancreaticoduodenectomy be employed for attempt at cure, as well as palliation? The decision depends upon the skill and experience of the operating surgeon and his assistants, the ability of the institution to provide all the necessary and involved laboratory aids, excellent anesthesia, ample and adequate X-ray studies, and an alert and able group of house physicians who can handle the larger operation with low mortality and morbidity.


It can be accurately stated that the cures of carcinoma of the head of the pancreas are few with the radical resection, and none with the palliative shunting anastomosis. However, there is greater longevity with the resective palliation than with the shunting operation—an average of 11 months vs. four and one half months in

favor of the resection. The mortality rate is essentially the same, varying between 10 per cent and 20 per cent, depending upon the type of case and condition of the patient upon arrival at any one clinic. The resectionists must not attempt their procedure when there is spread to the peripancreatic tissues or if there is involvement of the portal vein, hepatic artery, colic vessels or superior mesenteric vessels. A perfect plan would call for resection in the favorable cases, and some form of cholecystjejunostomy in the extensive cases and poor-conditioned patients. The main loss in the controversy is in the case of carcinoma of the ampulla of Vater, which cannot always be differentiated at the table from certain small carcinomas of the pancreatic head. Almost all resectionists have five-year cures or longer (we have one eight-year, one five-and-a-half-year, one four-year and one three-and-a-half-year cure) in carcinoma of the ampulla, and if the surgeon employs only the palliative procedure, then the ampullary carcinomas might be heavily penalized because the operator cannot or does not use the resection.

Certainly, if the institution or surgical team or both are not well equipped in performing the major resection, cholecystjejunostomy should be used, and without shame or guilt on the part of the surgeon. In that instance, if the lesion is favorable, the patient could be transferred to an institution where facilities are available and the resection can be performed without losing too much time. While most of the resections today are one-stage procedures, necessity could well demand the two stages, using two institutions to accomplish the task. The first institution relieves the obstructive jaundice, which improves the patient for safer resection in the second properly qualified institution.

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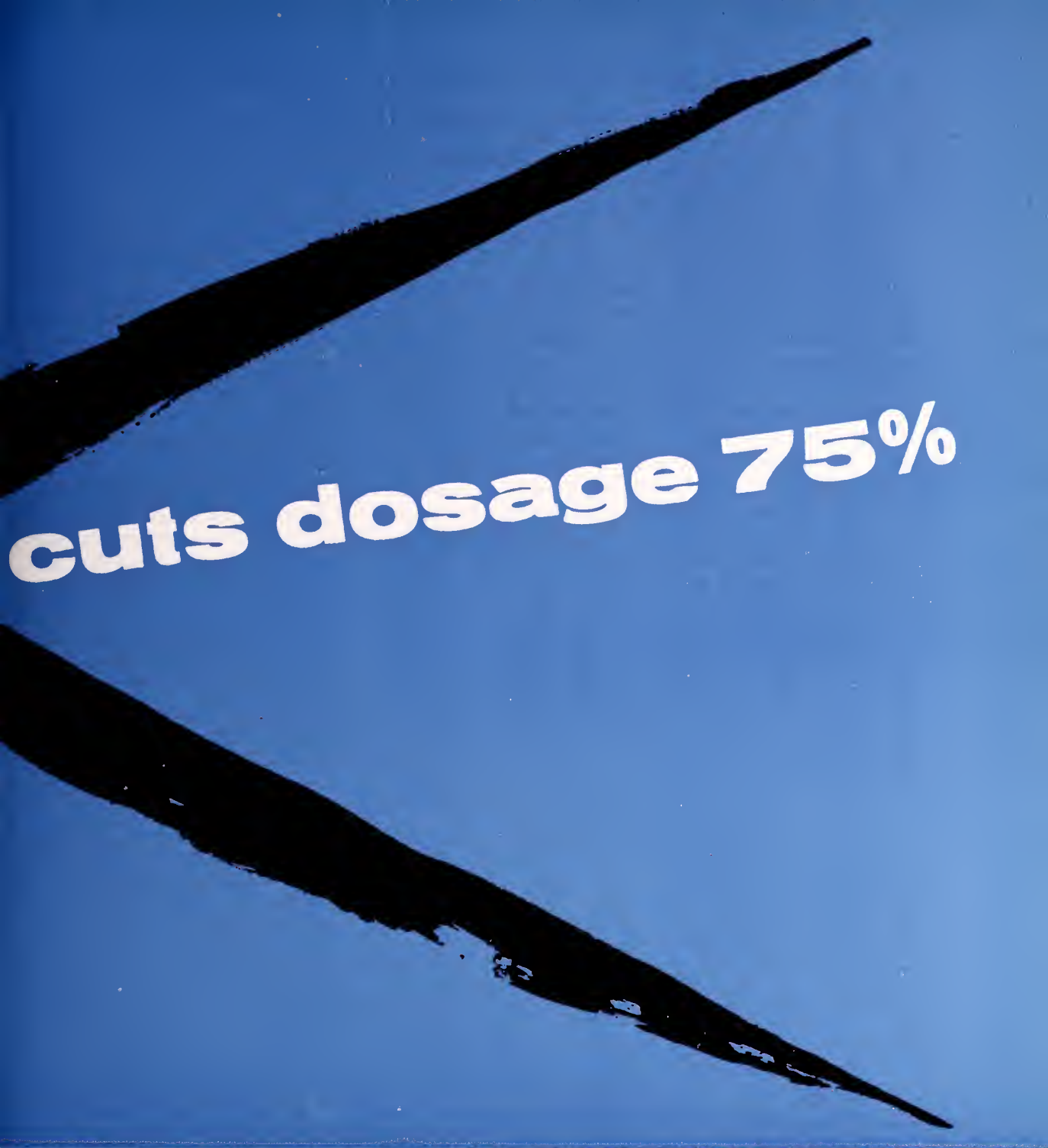
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ENDOCRINE THERAPY FOR THE GYNECOLOGICAL PATIENT*

RALPH R. ROBINSON, M.D.

Middlesboro

THIS PAPER will be limited to troublesome gynecological problems which often can be treated with endocrine therapy. It will further be limited to those conditions which can be treated with estrogens, progesterones or androgens. It is now evident that many gynecologic disorders are influenced by the psyche through the endocrine glands, especially the gonads. In this regard, one is constantly reminded that the organs of internal secretion are basically end-organs of the nervous system. Recently research has indicated that the emotions are integrated with various glandular functions, as demonstrated by the work of Benedek and Ruebenstein and Selye. The role played by compound E and cortisone in arthritis, rheumatic fever and psychosomatic disorders is essentially proof of the actions by the emotions in inducing organic disease via the endocrine system. For our purposes we can assume that the function of the ovary has a much more intimate relationship to the nervous system than hitherto considered.

Abnormal Uterine Bleeding

Abnormal uterine bleeding probably ranks high among the troublesome problems seen in the doctor's office. It is not a disease in itself but a sign. Irregular bleeding, the most common of all gynecological complaints, may be symptomatic of many conditions, including organic, endocrine or local disease or it may result from functional disturbances of the ovaries. The non-bleeding interval may be shortened or lengthened, the bleeding phase may be long, short or normal with the flow scanty, normal or excessive, or the cycle may be absent.

Treatment, when indicated, depends upon the etiological factors found. Management of uterine bleeding demands careful evaluation of the cause of the bleeding, immediate treatment to arrest hemorrhage, to combat anemia, and to restore normal function. In women near the menopause, abnormal bleeding should be regarded as a sign of endometrial malignancy

until careful diagnosis confirms or eliminates the presence of cancer. Rarely, I believe, must one resort to hysterectomy for patients under the age of 40.

Estrogens and progesterone control the bleeding of most of these women. I prescribe Estinyl®, 0.05 mgs. twice daily for 24 days, beginning on the first day of the period, combined with a hypodermic of 25 mgs. of progesterone on the 16th and 24th days of the cycle. Androgens are useful, although not as dependable as the cyclic therapy with estrogens. They may be used to control the continued profuse days of flowing. In refractory cases a curettage will be indicated and should, if possible, be done in the late portion of the period. Information obtained from the curettage may alter the proposed therapy. Most functional uterine hemorrhage results from critical teetering of the estrogen levels and failure of the midmenstrual upswing of those values which is designed to check bleeding by initiating another layer of endometrial growth. As a rule, this break in normal physiology is related to episodes of hypo-activity of the ovaries in response to pituitary gonadotropic stimuli. Accordingly, if this thesis be true, these episodes of bleeding can be stopped by raising estrogen levels by estrogen therapy. Menstruation is directly under the control of the steroid hormones of the ovary. These steroids therefore may be administered to correct excessive uterine bleeding due to disorders of the ovarian cycle and endocrine functions. If the ovarian cycle does not return to normal, estrogen-progesterone therapy may be repeated through additional cycles with larger doses of progesterone. After estrogen and progesterone therapy is discontinued, regular cyclic bleeding will continue in approximately 70 per cent of the patients, one-half of whom will subsequently show pregestational endometrium.

Amenorrhea

Regular uterine bleeding is not essential to health nor is a loss of a certain amount of blood at each bleeding interval. When not the result of constitutional disease, infrequent menstrual

*Presented before Bell County Medical Society, January 12, 1956.

cycles may be of importance only in that they reduce mathematical chances of pregnancy. When associated with normal ovarian function, too frequent or infrequent cycles should probably be left alone. Treatment with estrogens may disturb the adjustment made by the patient and result in anovulatory or sterile cycles. In general, unless amenorrhea is due to a medical disease which can be cured or improved by specific treatment, promise of re-return of normal ovarine cycles is not encouraging. Cyclic administration of estrogens will produce bleeding but this estrogenic or withdrawal bleeding does not alter the essential ovarian function.

Dysmenorrhea

Dysmenorrhea comes next on this list. Patients with this complaint have frequently gone from doctor to doctor hunting relief from the agonizing cramps which last from a few hours to three or four days each menstrual period. The acquired case frequently can be explained by existing pathology, such as endometriosis, adenomyosis, submucous fibroid, or other existing pathology.

Cervical stenosis must be considered but it is not the cause as often as some believe. The primary type of dysmenorrhea will very often defeat the therapeutic ingenuity of the most seasoned gynecologist. I have not been able to convince myself that these patients are demonstrating resentment at not having been born a man. Nor do I believe that many girls use dysmenorrhea as an excuse to miss school or that they may be permanently cured by emancipation from their mothers. I believe that most such patients are in pain and that we have no right to deny them our best efforts toward their relief. My regime in these cases is to discuss their problems with them and advise them that the cause is unknown; that the trial and error method will be used until we find a course of treatment which will benefit them. First I try Pranone®, 10 mgs. three times daily for six days, beginning eight days before the onset of the anticipated period, along with one Beller-gal® tablet four times daily, beginning two days before the onset of the period and continuing through the length of the period. If this fails I will try the same dose of Pranone for 12 days preceding the period, always using Beller-gal or Trasentin® just before and during the period. If no relief is obtained, I at-

tempt to produce anovulatory bleeding by adequate dosages of estrone sulphate, 5 to 7.5 mg. for 20 days, beginning on the fourth day of the flow. This usually allows painless bleeding at the next period and the regime is then continued for two or three months, after which it is discontinued. If the pain returns at a subsequent period, I recommend that the patient have a dilatation and curettage. If no relief is then obtained, I suggest a presacral neurectomy. This procedure has been approximately 80 per cent effective and the patient is forever grateful. I do not wish to imply that I am completely a non-believer in the psychological approach since I often use this method. In the case of patients who have a sensation of swelling in the pelvis I prescribe a diuretic drug, such as ammonium chloride, grains 15, four to six times daily or Diamox®, 250 mgs. daily. If diuresis occurs, considerable relief will result.

The Climacteric

Estrogens have been most used and most abused in the treatment of symptoms associated with the climacteric. In many women such symptoms are mild and do not require the use of estrogen therapy. However, when the symptoms are troublesome there is no more specific therapy than estrogen. I am going to pass hurriedly over the menopause, not because these cases are not among the most troublesome problems but because if you do not believe they need estrogens I shall not be able to change your minds, and my recommendations will be of no value to you. I often have to give estrogens in fairly liberal dosages. I find a definite percentage of women who apparently obtain inadequate relief from oral estrogens but who can be made absolutely comfortable by the use of intra-muscular estrogens. If that is what it takes, then they should receive that medication.

I am not as bold in the use of androgens for the control of vague symptoms as are some doctors, but I do use them. I resort more often to the combined estrogens and androgens and frequently find them most effective in refractory cases. However, the undesirable side effects of androgens are not as well tolerated by all patients or as transitory as many authorities have stated. Several of my patients have developed troublesome edema after taking 100 mgs. of methyltestosterone, one becoming edematous after taking only 30 mgs. Not infrequently a

patient tells us that she has grown a mustache since she began to dissolve the tablets in her cheek. Let me warn you against the prolonged use of androgens without continuous follow up visits, at which time you inquire if the patient has had a cold because that will be her interpretation of her hoarseness and she may even forget to tell you about it. Without this knowledge another 30 day course of treatment may cause permanent vocal changes.

Pre-Menstrual Tension

The state of nervous tension during the week preceeding the menstrual period occurs in enough women that we designate the syndrome as pre-menstrual tension. The bleeding phase of the menstrual cycle appears unannounced in very few women. It has been estimated that 30 to 40 per cent of menstruant women experience symptoms of tension severe enough to cause them to seek medical advice. If it were not for the fact that many women assume that pre-menstrual nervousness is natural, the percentage would no doubt be much higher. Usually one symptom is predominant but one or several of the following may regularly occur:

- | | |
|-----------------|---|
| 1. Nervousness | 5. Bloating sensation |
| 2. Irritability | 6. Headache |
| 3. Insomnia | 7. Backache |
| 4. Depression | 8. A general state of anti-social behavior. |

These symptoms are not those of dysmenorrhea. They occur a few days to a week before the flow and invariably reduce rapidly or completely disappear with the onset of menstruation. There is probably an abnormal storage of water in the body tissues at this time. The cause

of this is not fully understood but it may be due to an endocrine imbalance. Treatment usually resolves into three avenues of approach:

1. Diuretics
2. Hormones
3. Sedation

Ammonium chloride in doses of 15 to 30 grains every four hours, beginning at the onset of symptoms has frequently given unbelievable relief by promoting diuresis. However, the patient usually tires of the treatment and becomes lax in carrying out instructions. A rather new and useful diuretic drug is Diamox®, the dose of which is 250 mgs. daily. The hormone Pranone® may be used, giving 10 mgs. two to three times daily, beginning at the onset of the expected period. Occasionally a mild sedative will be necessary. I have found Bellergal® tablets effective and prescribe three to four tablets daily as the tension warrants, stopping immediately at the onset of the period. Some of these patients become desperate during this week and occasionally advance to a state of disability. They will be grateful for the relief you can give.

Summary

I have outlined how I manage troublesome gynecological problems. The ones I have considered in this paper are, in my opinion, of considerable significance. There are many treatments and managements other than those discussed. The problems of many patients necessitate trial and error methods. Frank discussion of this situation with patients will promote cooperation during apparent failure, until you can return them to a state of health and happiness.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KSMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words, and the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month — day of month if weekly — and year. The Journal of the KSMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. If illustrations are submitted with a paper, The Journal will assume the

cost for the first three one-column width half tones. The cost of additional illustrations will be borne by the essayist.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The By-laws of the Kentucky State Medical Association provide that all scientific discussions and papers read before the KSMA Annual Meeting shall be referred to the KSMA Journal for consideration for publication. The by-laws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky State Medical Association, 620 South Third Street, Louisville 2, Kentucky.



CASE DISCUSSIONS



CASE OF HEMATURIA

from

University of Louisville Hospitals
Louisville General Hospital

Presentation by George C. Spivak, M.D.,
Chief Resident in Urology:

On September 23, 1956, a sixty-three year old white widow was admitted to the General Hospital complaining of urinary frequency, urgency and hematuria. These symptoms had been present for twenty-four hours and the hematuria was associated with the passage of large clots.

Three days previously the patient had noticed a single episode of painless hematuria and in retrospect she remembered some soreness in the right flank which gradually became worse and did not respond to an adjustment by her chiropractor.

The patient's past history revealed an appendectomy in 1928 and in 1935 a sub-total abdominal hysterectomy. In 1936 a right renal calculus was passed spontaneously. Except for these several episodes this patient had enjoyed good health and had one child, now grown, who was living and well.

On physical examination this moderately well developed and well nourished elderly woman with a pale yellowish skin tint did not appear to be acutely ill. The positive physical findings were limited to the right flank and groin, which were moderately tender. The cardio-respiratory system was normal with the exception of a blood pressure of 160/80 mm. Hg. There was no evidence of peritonitis and the vaginal examination demonstrated a normal cervical stump.

The urine was reddish brown with a 3+ albumin test and loaded with both erythrocytes and pus cells. The usual chemical tests of the urine were normal.

The hemogram was normal with a hemoglobin of 13.25 grams and 13,400 leukocytes of which 76 per cent were polymorphonuclear cells. The Non-protein Nitrogen of the blood was 48 mg. per 100 cc., the carbon dioxide content of the blood was 7.2 meq. and the blood serology was negative.

Because of the patient's discomfort she was admitted to the hospital where an excretory pyelogram revealed prompt excretion from the left kidney, but no excretion of dye from the right kidney. (Fig. 1.) Cystoscopy demonstrated a normal bladder and a moderate urethral stricture. Ureteral catheters were introduced into both kidney pelves without difficulty and the left kidney was found to be morphologically and functionally normal. A few drops of dark blood dripped from the ureteral catheter in the right renal pelvis, but no urine was obtained. The right retrograde pyelogram revealed the lower calyces to be well cupped and essentially normal while the upper calyces were completely obliterated. (Fig. 2).

Considering this patient's history, her physical findings, laboratory studies and the cystoscopic survey, three possible diagnoses were entertained: 1) right renal tumor, 2) right renal artery thrombosis with infarction and intra-pelvic hemorrhage, and 3) spontaneous renal hemorrhage with secondary renal failure.

Discussion: Robert Lich, Jr., M.D., Chairman—Section of Urology:

The causes of hematuria are manifold, but in this patient we have a distinct type of hematuria. This patient passed large clots and such clots usually suggest intra-vesical bleeding as compared to active renal bleeding which usually clots in the ureter and is extruded into the

bladder as string clots. On the other hand, if the renal bleeding is sufficiently active the unclotted blood can pass down the ureter and clot in the bladder to form large clots. We know, of course, that cystoscopically there was no evidence of bladder tumor. Also, since the right pyelogram was abnormal and there was blood dripping from the right ureteral catheter, this bleeding was renal in origin. Since the clots passed were large this was evidently massive bleeding causing ureteral spasm and secondary flank and groin pain.

A non-functioning kidney usually suggests total ureteral obstruction or occlusion of the renal vessels. There was no evidence of an obstructive uropathy and since the upper calyceal pattern of the right kidney was disturbed the lack of renal function was due either to vascular obstruction or to a sufficiently large tumor that secondarily disturbed renal function. However, lack of function with a renal tumor is exceedingly uncommon.

As a general rule, renal artery thrombosis is associated with excruciating flank pain which often cannot be controlled satisfactorily by

opiates. Also, renal vein thrombosis is usually associated with profound vascular shock. This patient does not fit into either of these two pictures.

Profuse bleeding from the kidney is most commonly associated with papillary tumors of the renal pelvis, but spontaneous renal hemorrhage can and does occur. Severe hemorrhage in conjunction with infarction of a kidney could occur, I presume, but, in my opinion, it would be rather unusual.

Therefore, considering the presence of massive renal hemorrhage with pain and a renal filling defect the most likely diagnosis would be that of a papillary tumor with extension into the vascular pedicle of the kidney to produce infarction and non-function.

Operation: Nephro-ureterectomy September 26, 1956

Upon exposure of the patient's right kidney it was found to be of normal size and palpation of the renal vessels revealed the absence of pulsation. The kidney and ureter were removed. On section the upper portion of the renal pelvis was completely occupied by a



Figure 1. Excretory urogram demonstrating a non-functioning right kidney with a normal left kidney both functionally and morphologically.



Figure 11. Retrograde pyelogram showing an absence of filling of the upper calyceal system with an irregular filling defect in the pelvis and pyelectasis.



Figure III. Gross specimen showing darkened areas due to infarction.

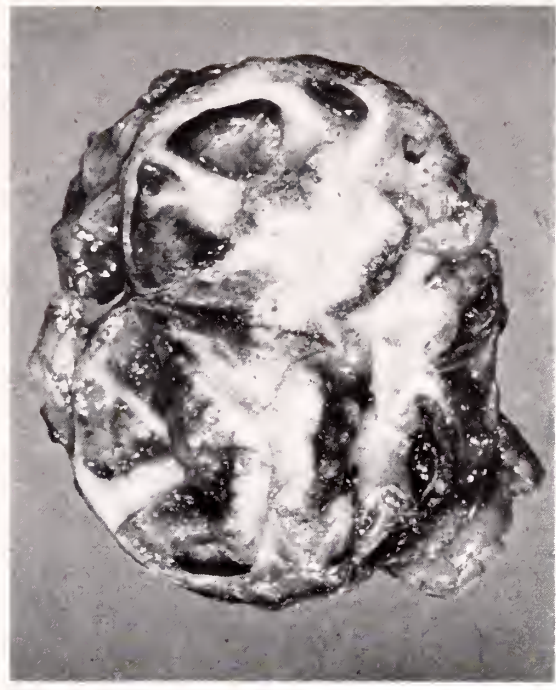


Figure IV. The kidney cut open to show the dilated calyces, the tumor filling the pelvis and the darkened areas representing areas of infarction.

papillary carcinoma and throughout the renal substance there were multiple infarcts. (Figures 3 and 4).

The prognosis of these tumors is grave. They spread by way of the blood stream and metastasize early to the lungs, liver and bones. Metastases to the vertebrae may also occur since

lymphatic spread to the local lymph nodes may occur.

SUMMARY

This patient presents a most unusual picture in which there occurred dual pathology in a single kidney: 1) a gradually expanding intrapapillary tumor and 2) a totally unrelated renal artery thrombosis.

SUPPORTING THE CERVICAL STUMP

Not all patients receiving hysterectomies need to have the cervix removed. Certainly there are limitations and indications for removing cervical stumps and cervixes at the time of the hysterectomy.

In those cases in which the cervix is not removed I have utilized a procedure which I feel very advantageous in keeping proper support to the cervix, and in the years to come preventing prolapse of the cervical stump in certain instances. This is done by simply suturing each round ligament to the v-shaped section that is made into the cervical stump, anchoring it with one suture, then closing the cervical stump over the round ligament with one or two sutures. This makes a very nice closure of the cervical stump itself as well as placing the round ligaments in an area where they are almost certain to heal well and give good support to the stump for the years to come.

George G. Greene, M.D.

SPECIAL ARTICLES

FREEDOM IN MEDICAL PRACTICE*

DWIGHT H. MURRAY, M.D.

President

American Medical Association

ALMOST six months have elapsed since we last met to deliberate and act on medical affairs. The time has passed quickly, but not quietly.

The rumble of war and revolution has re-sounded in our ears. The din from political battles has been deafening.

All of us . . . sooner or later . . . learn that today's events do not just swirl around us, but involve each of us. As doctors we cannot get away from them by claiming that our only interest is in the sick, and that we cannot be bothered by political, social and economic problems. These matters demand attention from the doctor as well as the lawyer, the businessman, the newspaper editor, the labor leader and the worker.

If we are concerned about what happens on the international, national and local fronts—and we should be—then certainly we cannot afford to be disinterested in what happens in our own area of health and medical affairs. Yet there is apathy in our ranks.

Replace Apathy With Active, United Profession

Today there is a greater need for a united, forceful and informed profession than ever before. We have been caught in the throes of a social revolution which demanded something for nothing. Changes have been taking place

**Delivered at the opening session of the House of Delegates at the clinical meeting of the American Medical Association in Seattle, Washington, November 27, 1956.*



Dr. Murray

all around us, and medicine has not escaped unscathed.

For example, in a few days Public Law 569, the bill providing medical care for military dependents, becomes effective throughout the land. Contracts already have been signed with the government by the majority of our state societies. No longer can any doctor claim that this law does not affect him. No longer can he say that government laws really are not changing the practice of medicine.

Public Law 880 better known to all of us as H.R. 7225, is another case in point. Medicine now is facing the problem of protecting the taxpaying public from abuses and of co-operating with the government to carry out the provisions of the law. The law is now on the books, and we must provide the leadership necessary to make it work as well as possible.

It was encouraging to hear Ezra Taft Benson, secretary of agriculture, say last week before the American Association of Land Grant Colleges and Universities:

"Sooner or later the accumulation of power in a central government leads to a loss of freedom. . . Raids on the federal treasury can be all too readily accomplished by an organized few over the feeble protests of an apathetic majority. With more and more activity centered in the federal government, the relationship between the cost and the benefits of government programs becomes obscure. What follows is the voting of public money without having to accept direct local responsibility for higher taxes. . . .

"If the present shift of power from state to federal authority which started 25 years ago is allowed to continue, the states may be left hollow shells."

It was encouraging to hear such comments

from a member of the President's Cabinet. I only wish that all members of the official family, and more important, every member of the United States Congress, felt the same way.

The expression of this philosophy, with which medicine so heartily agrees, sounds good, but putting it into practice is the thing we are really interested in.

Today the medical profession along with business and industry is caught between those who desire to promote sound government and those who desire even more intensely to perpetuate party power. Unfortunately, in recent years a benevolent federal government appears more attractive to the voting public than the preservation of individual freedom. Medicine must do its utmost to reverse this trend.

Medical Freedom Essential

In my travels around the country as your representative the last 18 months, I have seen little dissension or rancor within our ranks. However, I must report that I have seen too much complacency over governmental encroachment into medical affairs. And I am deadly serious when I say to you that apathy by the few, or by the many, can be detrimental to all.

No nation can merely reap the benefits of freedom; it also must sow seeds of freedom.

In medicine the situation is the same. If an apathetic medical profession takes its freedom for granted, it will be the beginning of the end. A strong, free profession must work for freedom so that it may live in freedom. And history tells us that once medicine loses its freedom, other fields of private endeavor are immediately in danger.

I do not wish to paint a dark or distorted picture of medicine's free status and its stature in America today. But I do believe words of caution and an appeal for vigilance are in order.

The road of apathy and disunity can only lead to disorder and perhaps disintegration, and we must sound a warning to all our colleagues who don't care, or who are pulling in the opposite direction. The road of alertness, action and unity is the proper road for all of us to be traveling together.

If I had just one wish for the coming year, it would be to command the time and talents of the 160,000 physicians in the American Medical Association. I would set us all to the task of emphasizing and re-emphasizing the

absolute necessity of patient and professional freedom.

Patient's Right To Choose His Doctor

I believe it is one of our prime responsibilities to prove to our patients that their right to choose their doctor is a most important one.

Free choice brings a bond of confidence between doctor and patient which no compulsory medical system can create. It means that the patient knows the physician will be interested in him as a person, not as just a serial number of the 2:45 appendicitis case.

For the doctor free choice means that the patient has selected him for his abilities, training, sincerity and personality. When a patient comes into my office, I know he has made a choice. And from that moment there begins a physician-patient relationship of the highest order. To me the patient is someone special, and I in turn hope I am someone special to him.

Once the patient has made his choice the physician automatically assumes an unqualified responsibility to the patient. No system of medical care that uses a third party to bring doctor and patient together can match our kind of cooperative performance for the treatment of illness, the cure of disease and the betterment of the patient's health.

Freedom to select a doctor is part of everyone's great freedom to choose—to choose what he wears and eats; where he works and worships, and how he votes. Take away any part of this freedom and great damage is done to our democratic system.

Free Conduct In Medical Treatment

Another freedom closely tied to freedom of choice is freedom in the conduct of medical treatment.

As the recent meeting of the World Medical Association in Havana, Cuba, Dr. Rolf Schloegell of Germany made a stirring defense of free conduct of medical treatment. He told us that the medical profession believes the attending physician alone is competent to decide what measures he deems necessary and will apply in order to bring about the desired improvement. He warned too of the danger of excessive restriction on the freedom of the patient and the attending doctor.

Yet the trend toward extending social security in the medical care field has been steady and has accelerated since the end of World War II.

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"Freedom in Medical Practice"

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The dangers of shifting responsibilities for medical care from the patient and doctor to the government are obvious. The caliber of medical care cannot be as high when both patient and doctor are dependent upon government. Initiative succumbs to dictation, and self-reliance is replaced by the crutch of government.

We do not deny that there is an area of legitimate concern by the government for the health and welfare of the people. But each year government seems to extend that area. We get some idea of this expansion from the new federal medical budget.

This year, according to our Washington Office, the average family will be paying \$54.61 for the U. S. Government's health and medical activities. And the total expenditures this year amount to 2½ billion dollars—290 millions more than last year. Even in an over-all federal budget of 61 billion dollars, the total health cost of 2½ billions is not significant. It is a billion dollars more than the cost of running the Commerce Department, half a billion more than the Agriculture Department and six times more than the Interior Department's budget.

Many expenditures obviously are necessary to keep up our unsurpassed public health standards, and research may pay rich dividends in scientific discoveries. But there is no doubt that much money is being spent on medical activities that should not involve government participation.

The trend is to spend more and more government money on health and medical matters because it is good politics. Apparently many Americans still want to see government in the role of a big brother, dishing out so-called gifts and bargains under the guise of benevolent economic planning.

I believe it is our duty, as it is everyone else's, to combat the attitude of "what's in it for me?" and to promote the long-honored creed of "what's best for all Americans and our free society?" I think that a nation can drift into state medicine inch by inch just as surely as if the scheme were foisted upon a people overnight. The "drift" method may take longer but the result will be the same.

So it is time all of us sounded the alarm against soft and superficial security and against the invasion of personal responsibility. It is

time we stood up together for militant freedom and for full rights and responsibilities of the individual.

Belgian Doctors Turn Back Government

There is no better example of what a unified medical profession can do than in the story of the recent fight of the Belgian doctors' against the government's proposals for a state service of medicine.

Without consulting the medical profession the Belgian government proceeded to draft rules and regulations of health to be incorporated in the nation's social security legislation. Under the proposals doctors were to sign an agreement to abide by the present rules and any later regulations. For the patient there would be the usual red tape in getting medical care.

When the Belgian doctors learned of the scheme, they met in conference with the government. They told the government what they wanted and what they would not accept. The government agreed.

For several months everything was quiet. Then the Belgian doctors suddenly read about the new health bill that the government was sending to Parliament. It was quite contrary to the earlier agreement worked out by the profession and the government. But the bill was passed quickly.

The Belgian medical profession protested and said it would not be placed under the Ministry Of Labor. Instead the doctors proposed to set up their own plan of medical assistance.

Before long, the government saw that the medical profession meant business and that the doctor's plan was an attractive one. So it declared that its own bill was not in force and could not be in force without the consent of the medical profession.

To me this fight against legislative intervention in medical care is excellent evidence that the profession can defend itself if it unites to defend the basic principles of freedom and if it offers constructive proposals. By using the Belgian national motto, "in union there is strength," the medical profession showed doctors everywhere that dangerous government plans can be turned aside by the strong.

I also read recently in the Journal of the World Medical Association of the fight of the medical profession of Malta against a British government scheme to introduce a full-time

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EDITORIALS

THE NATIONAL FUND FOR MEDICAL EDUCATION

THE NATIONAL FUND for Medical Education is a nonprofit, voluntary corporation established in 1949 for the benefit of all the nation's 82 medical schools. It was chartered by congress in 1954. Since then more than ten million dollars has been collected from interested individuals and corporations and paid to medical schools.

During 1956 more than 1700 corporations and a great number of individuals including physicians contributed \$1,800,000 to this fund. The Ford Foundation has set aside ten million dollars to match unrestricted contributions to the fund over a five-to-ten year period with a maximum limit of 2 million dollars in any one year. Every new or annual gift, therefore, is certain to be matched 100 per cent or thereabout by this foundation alone.

Industry, nationwide, is becoming increasingly interested in this project because it is realized that lifting medical education from the doldrums of financial pressure means, in the long run, better health for the people and better industrial production. But corporations will not

maintain their enlivened interest unless individuals and, more especially physicians lead the way.

The American Medical Association has sponsored this enterprise and has urged every state organization to get behind it. It is desired that as many doctors as possible contribute to this fund one hundred dollars, or more (or less if need be) annually. This contribution is, of course, income tax exempt and may be designated for the school of the donors selection.

Some states have been able to interest a great number of physicians to participate in this fund and have annually turned in surprisingly large amounts. The idea does not seem to have taken hold of the imagination of our members and our contributions have been small. Let us remember that it may be earmarked for our own school, which urgently needs financial help, and that any sum contributed will aid in improving medical education in Kentucky.

Sam A. Overstreet, M.D.

RURAL HEALTH

THE LEADERS of the medical profession in Kentucky have become aroused to the need for more adequate medical care in rural sections of the state. We are, I believe, doing those things which are within our power to correct an admittedly bad situation. But health is something that requires more than just the work of the medical profession. Every person in the state, both professional and layman, must become fully conscious of the need and must assist in a statewide program to correct it.

I believe that most of us have always had the impression that the country is a healthy place to live, and that health problems are

actually less acute in the rural areas than in our cities. Perhaps the first real indication we had that this was not true was the tremendous rejection rate by the selective service in these rural areas.

A bottle of quinine on the mantel piece by the chimney corner will not cure malaria unless it is given to all the household in infested areas. So all the recent discovery of "wonder drugs" for the comfort and cure of the many ills that fret mankind are useless unless they reach the people.

The best and most reliable way for this dissemination of public health is through a county health officer and a health center. Every coun-

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Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

Rural Health

(Continued from Page 357)

ty in our state has a legal center, (the court house), so a precedent is thereby established for a county health community center. If this center is built and supported by the community, the people will have a pride of ownership. Its auditorium can be used as a meeting place of all civic, and other clubs, that work for the betterment of their community.

All missionaries now have medical training, and a good health officer can be a medical missionary preaching the gospel of good health in his county, for there are still people in our state whom the swift current of progress has passed

by, and who whirl around in a circle on the edges of its banks. It is our local health officials, above all others, that can minister to the needs of the public in these isolated areas.

Our State Health Department now has many experts in this field, and under their leadership a bright future is in store for our state. (I wish to remind our profession that we are the only state where there are no quacks.)

A good health unit is a valuable asset to every practicing physician in his county, and he should keep this instrument sharpened and in good condition so as to cut out all infectious as well as non-infectious diseases.

J. Watts Stovall, M.D.

Let us never forget that every station in life is necessary; that each deserves our respect; that not the station itself, but the worthy fulfillment of its duties does honor to man.

—LYON

"Freedom in Medical Practice"

(Continued from Page 356)

salaried medical service without the right of private practice, on an island dependency of Malta. Here again the doctors reacted with unity and strength, and successfully thwarted the government's plan.

There is a lesson in these stories from Belgium and Malta. They prove that a unified profession has a great political power for good—the good of the patient, the doctors and the nation.

Confidence and Understanding Needed

While we are developing unity within our own ranks, I believe it is equally important to continue to build up the confidence and respect of our patients and to make our legislators aware of the necessity for freedom in medical practice.

Let us never reduce the quality of service we render to our patients, and never lose the personal touch in medicine. Where there is any opportunity to improve upon our medical care, let us seize it and show our abilities to do an outstanding job. Satisfied patient-customers will give us deserving support when we need it.

We also should realize that the destiny of medicine can be determined to a large degree in the halls of Congress. If this be true, then

it is even more important that we take an even greater interest in those who elect the Congressmen. Sympathetic understanding of our position by federal legislators through the voting public will be an insurmountable deterrent to the forces supporting state medicine.

The day has come, gentlemen, when we can no longer look upon medical economics and social changes merely as issues to be considered during our limited leisure hours. Our interest in them cannot be superficial or intermittent.

We now must pay daily attention to these matters. Medical socio-economic affairs can no longer be just incidental with us. They must be a vital part of our life and of our profession.

Each of us, I believe, should dedicate himself to the words included in the oath of office taken by Presidents of the A.M.A.

"I shall champion the cause of freedom in medical practice and freedom for all my fellow Americans."

As doctors, representatives to the A.M.A. and as spokesmen for the A.M.A., let's remember these words and live by them. And to alter a phrase of President Lincoln's only slightly: Let's make common cause to keep the good ship of medical freedom on this voyage, or nobody will have a chance to pilot her on another voyage.



ORGANIZATION SECTION



4th Annual Immunization Week in Ky. is May 5-11

The full cooperation of each county medical society is requested in the fourth annual observance of "Immunization Week in Kentucky," May 5 to 11, 1957, states C. C. Howard, M.D., chairman of the KSMA Advisory Committee on Public Health.

Sponsored by the KSMA, the purpose of this week is to acquaint the public more fully with the importance of immunizations against diphtheria, polio, typhoid, smallpox, tetanus and whooping cough.

An immunization inventory of every family in Kentucky, especially the children, was urged by Dr. Howard, who has directed this KSMA program each year since 1954.

"Each of these diseases except smallpox was responsible for unnecessary deaths during the past year in Kentucky," said Dr. Howard, who emphasized the importance of the medical profession's urging the public especially to see that pre-school children in their own community are immunized, since most deaths occur under the age of five years from these diseases.

KSMA Dist. 9, TB Dist. 3 Join in May 9 Meet at Paris

KSMA President Richard R. Slucher, M.D., and William R. Willard, M.D., dean of the new U of K College of Medicine, will share the spotlight at the dinner session of a joint meeting of the Ninth Councilor District and District Three, State Tuberculosis Hospital at the hospital in Paris, Thursday, May 9.

Dr. Slucher and Dr. Willard will be featured speakers at the dinner program which begins at 6:00 p.m., according to J. M. Stevenson, M.D., Brooksville, district councilor. Preceding the dinner a chest diseases symposium, sponsored jointly by the Ninth Councilor District and District Three State Tuberculosis Hospital, will be held at the hospital, reports Supt. I. Zapolsky, M.D.

The scientific session will get under way at 3:00 p.m., as Donald B. Effler, M.D., of the Crile Clinic, Cleveland, speaks on "Lung Tumors." D. N. Pickar, M.D., of the Veterans Administration in Louisville will discuss "The Diagnosis of Fungus Diseases of the Chest." George W. Pedigo, M.D., of the University of Louisville will follow the after-dinner speakers with a scientific essay on "Pulmonary Manifestation of Cardiac Disease."

Counties included in the Ninth Councilor District are Pendleton, Bracken, Mason, Fleming, Bath, Bourbon, Nicholas, Scott, Harrison and Robertson.

AAGP Head Will be Featured at Ky. Chapter Assembly

Malcolm E. Phelps, M.D., president, American Academy of General Practice, El Reno, Okla., will be the featured speaker at the annual KAGP banquet to be held Thursday evening, April 25, during the Chapter's sixth Annual Scientific Assembly, April 23-26, at the Brown Hotel in Louisville.



Malcolm E. Phelps

Dr. Phelps is one of the "founding fathers" of the AAGP. He also helped organize the Oklahoma chapter and served as its first president. A graduate of the medical school of the University of Iowa, he interned at the University of Oklahoma Hospital for a year and served a residency in surgery there. He has practiced in his home town of El Reno since 1931.

The three-day KAGP program will include sixteen scientific presentations from Kentucky and out-of-state physicians, according to Carroll L. Witten, M.D., Louisville, chairman of the Committee on Arrangements.

Registration will be conducted for members, wives, guests and exhibitors on the Brown Hotel mezzanine each day. A program of the Assembly was carried in the March issue of The Journal.

KSMA President will Visit 2nd Dist. at Henderson

KSMA President Richard R. Slucher will address physicians of the Second Councilor District on "What Your Dues Dollars Do," in the district meeting at the Henderson County Club near Henderson on May 5.

A scientific essay, entitled "Differential Diagnosis of Stroke," will be presented by Lester Reed, M.D., Louisville, announces Walter L. O'Nan, M.D., district councilor. W. B. Blue, M.D., Henderson, will preside.

The dinner will start promptly at 7 o'clock, following a social hour. The Henderson County Medical Society is serving as the host group.

Counties included in the Second District are Union, Webster, McLean, Ohio, Hancock, Daviess, and Henderson.

A one-year postgraduate cardiovascular research program will start July 1 at the Medical College of Georgia, according to the American Heart Association, sponsoring agent. Five post-doctoral students will be enrolled.

RH Conference Marks Record Number Despite Weather

Despite snow, rain and transportation difficulties, a total of 700 persons registered for the Twelfth Annual National Conference on Rural Health March 7-9 in Louisville, according to figures released by the Louisville Chamber of Commerce which handled the registration.

Of this number more than 500 were from Kentucky. Veteran observers felt this was a record attendance.



President Richard R. Slucher, M.D., extends a KSMA welcome to the more than 500 persons attending the first Conference session. Many doctors were included.

Satisfaction was expressed over the number of KSMA members present.

KSMA President Richard R. Slucher, M.D., Buechel, joined George F. Lull, M.D., Chicago, secretary-general manager of the AMA, in welcoming visitors in behalf of their organizations which were co-sponsors of the Conference.



George F. Lull, M.D., secretary-general manager, A.M.A., Chicago, greets visitors on opening day of National RH Conference.

Wyatt Norvell, M.D., New Castle, chairman of the KSMA Committee on Rural Health and also of the Kentucky Rural Health Council, expressed gratitude for the excellent cooperation of other members of the council and for the substantial number of Kentuckians in attendance. He complimented Aubrey Gates, Little Rock, Ark., the council's executive secretary for his efforts toward the success of the three-day meet.

Comparing health and medical problems under the theme, "Together We Build," were physicians and farm leaders repre-



President Richard R. Slucher, M.D., (right) discusses the Conference program during an intermission with F. S. Crockett, M.D., Lafayette, Ind., chairman AMA Council on Rural Health, and Willard A. Wright, M.D., Williston, N. D., regional director of the AMA RH Council.

sending rural areas across the nation from California to Florida and distant Puerto Rico. They decried the loss of farm land to non-farm uses, considered the trek to the suburbs and country beyond by "rurbanites," discussed agricultural economics, and the problems of the aging and of migrant workers.

Cooperating with the KSMA in extending Kentucky hospitality, the Jefferson County Medical Society entertained members of the AMA Council on Rural Health at a special dinner at the Pendennis Club. The well accepted Thursday evening community kaleidoscope program was sponsored by the Jefferson County Recreation Board under the direction of Charles Vettner.

Mrs. Charles B. Stacy, Pineville, president of the Woman's Auxiliary to the KSMA, and Mrs. Clark Bailey, Harlan, Kentucky chairman of the WA Rural Health Committee, led Auxiliary activities in promotion of attendance to the Conference from over the State.



Three tireless Conference promoters enjoy a break together. KSMA Field Secretary John Guy Miller, Louisville (left) chats with Aubrey D. Gates, Little Rock, Ark., executive director AMA Council on Rural Health, and Wyatt Norvell, M.D., New Castle, chairman of the KSMA Committee on Rural Health and head of the Ky. RH Council.



Mrs. Charles B. Stacy, Pineville, president Woman's Auxiliary to the KSMA, compares rural health notes with Mrs. Clark Bailey, Harlan, second vice president Woman's Auxiliary to the AMA and Ky. chairman of the WA Rural Health Committee. The Auxiliary was very active in the promotion of Conference attendance.

UK Med. School Advisory Committee Named

A Medical Advisory Committee to the University of Kentucky College of Medicine has been appointed by University of Kentucky President Frank L. Dickey.

Personnel of the committee has been announced through the office of William R. Willard, dean of the medical school. Dean Willard appeared before the December 13 meeting of the Council of the KSMA and explained that the committee was to be appointed by President Dickey to serve in an advisory capacity as plans were made for the new school.

Dean Willard said that while a few members of the committee might be appointed "at large," it was the desire of the University to ask the Council to assist in making recommendations for the committee. This the Council voted unanimously to do.

Following are the names of the members of the committee named to date: O. Leon Higdon, M.D., Paducah, Charles B. Wathen, M.D., Owensboro, Delmas M. Clardy, M.D., Hopkinsville, Sam A. Overstreet, M.D., Louisville, Jesse T. Funk, M.D., Bowling Green, B. B. Baughman, M.D., Frankfort, Carl W. Kumpe, M.D., Ft. Mitchell, Harry C. Denham, M.D., Maysville,

C. C. Johnston, M.D., Lexington, Joe M. Bush, M.D., Mt. Sterling, Wendell V. Lyon, M.D., Ashland, Louise Caudill, M.D., Morehead, Paul B. Hall, M.D., Paintsville, Charles B. Stacy, M.D., Pineville, Charles D. Cawood, M.D., Middlesboro, Russell Teague, M.D., Louisville, Murray Kinsman, M.D., Louisville.

Ralph Angelucci, M.D., Lexington, and Dan Elkin, M.D., Lancaster, are ex-officio members of the committee as members of the Board of Trustees of the University.

Welcome, New Members!

The KSMA extends a welcome to the following physicians who have joined its membership: John C. Ayers, Jr., Cave City; Si A. Past, Sharpsburg; George T. Hamm, Corinth; Leo N. Kirch, Harlan; Carroll W. Trailer, Calvert City; George F. Ballard, Harrodsburg; Robert E. Norsworthy, Hartford; Harper Wright, Bowling Green; Francis X. Sommer, Corbin; Theodore Koss, Paducah; John W. Walker, Jr., Mt. Vernon;

George S. Dozier, William H. Hyden, S. W. Lykins, C. N. Kavanaugh, Jr., Earl E. Spencer, Lexington; R. W. Bumbarner, Freeman P. Fountain, L. O. Giesel, Walter I. Hume, Jr., Walter Kleinstuber, Jr., W. P. Peak, Henry W. Post, Carroll H. Robie, T. G. Taylor, LeRoy Tunnell, Jr., F. J. Bajandas, A. C. Kennedy, all of Louisville.

Kentucky nursing schools, which graduated 529 persons last year, are attracting more students to the Commonwealth but not in the nation as a whole, according to Miss Rhobia Taylor, New York, field consultant for the National League for Nursing. America has 430,000 professional (registered) nurses but needs 500,000, Miss Taylor said.

Ky. Chapt. ACS Will Meet at French Lick April 26-27

The Kentucky Chapter of the American College of Surgeons will hold its annual meeting at the Sheraton Hotel, French Lick, Ind., on April 26-27, according to an announcement by R. Arnold Griswold, M.D., Louisville, Chapter president.

James Drye, M.D., Louisville, who is in charge of program arrangements, states that the two-day scientific session will include scientific discussions by the following physicians: Robert Zollinger, M.D., and Edwin Ellison, M.D., Columbus, Ohio, "Hemigastrectomy with Vagotomy;" Grayson Carroll, M.D., St. Louis, Mo., "Urinary Infections—Etiology, Diagnosis and Treatment;"

Don Effler, Cleveland, Ohio, "Complications and Surgical Treatment of Hiatus Hernia;" Hilger Jenkins, Chicago, Ill., "Surgical Lesions of the Small Intestine;" John E. Dunphy and Norman Zomcheck, Boston, Mass., "Surgical Exploration for Massive Gastrointestinal Hemorrhage of Obscure Origin;" N. J. Giannestras, Cincinnati, Ohio, "Correction of Plantar Keratosis by Metatarsal Shortening;" Donald Glover, Cleveland, Ohio, "Some Unusual Surgical Problems of Infancy and Childhood;"

Gerald O. McDonald, Chicago, Ill., "The Prophylactic Use of Anticancer Agents in Surgery;" Henry K. Beecher, Boston, Mass., "Early Care of Wounded Men;" Howard Ufelder, Boston, Mass., "The Surgical Treatment of Cancer of the Vulva;" John O. Moore of Cornell, New York City, "A Method for Preventing Trauma in Automobile Accidents;" Prather Saunders, Chicago, Ill., "Some Possibilities for the Future of the American College of Surgeons."

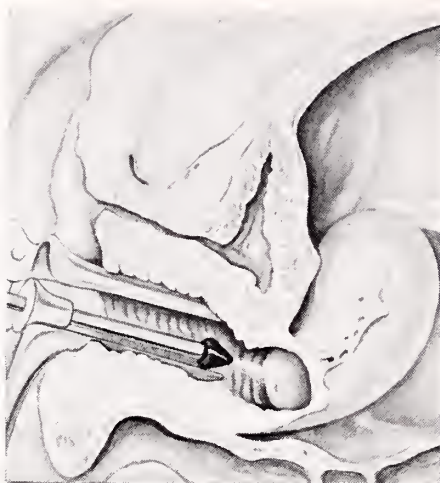
R. Arnold Griswold M.D., Louisville, will moderate a panel discussion on "Nodular Thyroid Disease" at the Friday afternoon session. Panel members will include Beverly T. Towery, M.D., Louisville, Peter Heinbecker, M.D., St. Louis, Mo., and John B. Hazard, M.D., Cleveland, Ohio.

President Slucher Will Visit 1st and 6th Districts

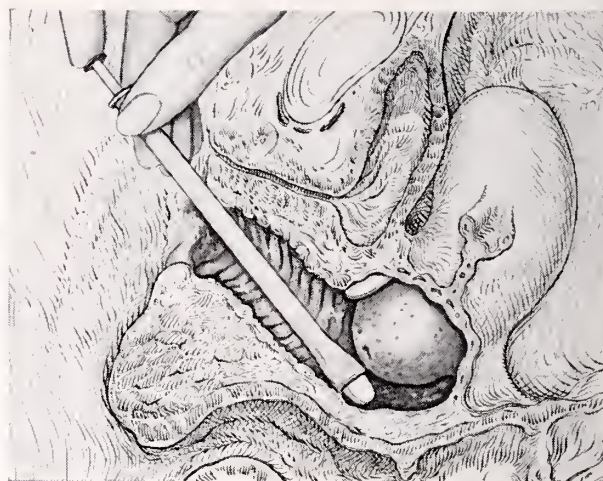
Richard R. Slucher, M.D., KSMA president, will discuss "Then and Now," and "It Has Been Good to You, Too"—subjects pertinent to organized medicine —at two councilor district dinner meetings late this month.

On April 23 he will attend the Sixth District Councilor meeting at the Franklin Country Club, Franklin, and on April 24 will visit the First Councilor District in its meeting at the Ritz Hotel in Paducah. A scientific program at the former meeting will be presented by Samuel E. Paris, M.D., Bowling Green ophthalmologist, and by Thomas N. Stern, M.D., of the University of Tennessee School of Medicine, at the latter.

L. O. Toomey, M.D., Bowling Green, is the Sixth District Councilor and J. Vernon Pace, M.D., Paducah, is councilor for the First District.



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*Williamson, P.: Trichomonad Infestation, M. Times 84:929 (Sept.) 1956.

SEARLE

Prominent MDs Listed on Ky. Surgical Program

Ten timely surgical subjects will be presented at the annual meeting of the Kentucky Surgical Society on May 17-18 in Lexington, according to C. Melvin Bernhard, M.D., Louisville, secretary-treasurer.

Frederick A. Collier, M.D., chairman of the Department of Surgery at the University of Michigan for the past twenty-seven years, will discuss "The Spleen—Some of its Diseases That May be Treated by Surgery."

Other physicians appearing on the two-day program and their presentations include Howard E. Dorton, M.D., Lexington, "The Treatment of Massive Bleeding from Duodenal Ulcer by Means of Vagotomy and Pyroplasty;" Branham B. Baughman, M.D., Frankfort, "Obstruction of the Colon;" James B. Holloway, M.D., Louisville, "Surgery of the Neck;"

William K. Massie, M.D., Lexington, "Results of Treatment of Protruding Discs and Lumbo-Sacral Instability;" William H. Hagan, M.D., Louisville, "Intussusception in the Adult with Particular Reference to Intussusception of the Sigmoid Colon;" Thomas J. Giannini, M.D., Louisville, "Diagnosis and Treatment of Facial Fractures;"

Edward B. Mersch, M.D., "Concurrent Liver Biopsy and Cholecystectomy;" Lytle Atherton, M.D., and Douglas Atherton, M.D., Louisville, "Philosophy, Judgment and Prostatic Carcinoma;" Hubert C. Jones, M.D., Berea, "Three Year Survey on General Surgery in a General Hospital."

The mornings of the two-day meeting will be devoted to scientific sessions, Dr. Bernhardt said. The afternoons will be reserved for recreation and relaxation.

PG Seminar is Well Attended

Sixty physicians and their wives attended the March 14 regional postgraduate seminar, sponsored by the KSMA, the U of L School of Medicine and the Kentucky Academy of General Practice, which was held at Beaumont Inn. Harrodsburg, according to Garnett Sweeney, M.D., Liberty, chairman of the KSMA Associate Committee on Postgraduate Medical Education.

The two-hour afternoon scientific program included discussions of childhood tuberculosis, stroke, and hemiplegia. Following a dinner at 6:30 p.m., the seminar study continued with an essay on thyroiditis. The presentations were given by William C. Adams, M.D., Richard C. Turrell, M.D., Rex O. McMorris, M.D., and Beverly T. Towery, M.D., all members of the U of L medical school faculty.

Britain's doctors threatened recently to walk out of the State-run health service unless the Government meets their demand for a 24 per cent pay increase. Prime Minister Macmillan rejected the demand, according to published reports, saying a royal commission would consider the doctors' economic status under Britain's socialized health plan. Doctors now get 17 shillings (\$2.83) per year for each of the first 1,000 national health patients.

TB Hospital Director Resigns to Accept AMA Post

Joe D. Miller, Frankfort, has tendered his resignation effective April 30, as executive director of the state's six Tuberculosis Sanatoria to accept a staff position with the Council on Medical Service of the American Medical Association in Chicago.

Miller has held the position since Nov. 1, 1951. He will be succeeded by Thomas M. Layton, assistant director since 1956. Layton is a former attache of the budget division of the Department of Finance.

Dan. S. Tuttle, administrator of the Berea College Hospital, will succeed Layton.

AMA Annual Session June 3-7 In New York Among Best

An impressive revue of exhibits, scientific lectures, medical films and color television programs will be seen and heard at the AMA's 106th Annual Meeting in New York City June 3-7.

Approximately 18,000 physicians from across the nation are expected to participate in this world-famous "short course" in postgraduate medical education. Technical and scientific exhibits will be displayed on four floors of the Coliseum. Included is a color television program of live surgical procedures from Roosevelt Hospital, to be shown later at the KSMA Annual Meeting.

The June 3 morning program will review recent progress in surgery and recent advances in medicine in the afternoon. The use and abuse of mood-altering drugs will be featured at Tuesday's general meeting. Programs being arranged include one on allergy, another on legal medicine and one on medical communication. More than 20 foreign countries are sending films to the "international film program" at the Barbizon Plaza Hotel.

Registration opens at the Coliseum on Monday, June 3, at 8:30 a.m. and closes Friday, June 7, at noon. Advance registrations will be accepted on Sunday. The exhibit hall will be open to "doctors only" on Tuesday and Wednesday mornings. Further details may be found in The Journal of the AMA.

AMA Post-Meet Tours Offered

Two post-session tours to Europe, including special scientific sessions in London, Paris and Geneva, and three plane tours to Bermuda are offered AMA members following the Association's Annual Session in New York City, June 3-7, 1957.

The European tours are one of 24 days to France, Italy, Switzerland, and Belgium, and the other a 38-day trip to England, Belgium, Holland, Germany, Switzerland, Austria, Italy and France. One five-day Bermuda trip is offered, and the others are of eight days, with an opportunity to travel round trip by air or go one way by air and one way by steamer. For further information, write to Wm. J. Glennon, P. O. Box 3433, Chicago 54, Ill.

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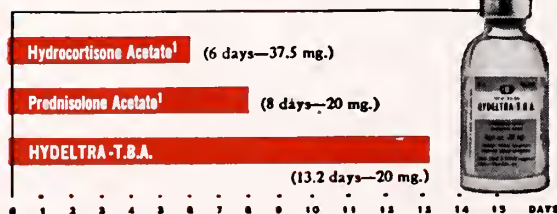
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I. Hollander, J. L., Paper read at conference in New York City, May 31 and June 1, 1955

NFIP Units Offer Assistance in Salk Vaccine Program

Chapters of the National Foundation for Infantile Paralysis are anxious to assist the doctors of Kentucky in promoting the use of Salk Vaccine before the polio season is under way, according to Paul Hughes, Jr., state representative of the NFIP.

In an all-out effort that is urged by the American Medical Association and the Kentucky State Medical Association, the Foundation considers that county medical societies will need the assistance of all community groups interested in the problem, the representative advised.

"Our local volunteer chapters look at this program as the culmination of all they have worked for and their interest therefore is deep," says Mr. Hughes, "and if chapter members have not already been in touch with you we urge that they be included in your planning, since as interested citizens they can help with publicity and promotion and administrative details that the doctors need not have to concern themselves about."

The NFIP states that in instances where money may be needed to help carry out the medical aspects of a county society's program, the local polio chapter may be in a position to help.

The 1957 meeting of the American Goiter Association will be held at the Hotel Statler, New York, May 28, 29 and 30. The three-day program will include papers and discussions dealing with physiology and diseases of the thyroid gland.

Physicians Urged to Nominate Candidates for Awards

Nominations are in order for the KSMA annual honor awards—the Distinguished Service Medal and the Outstanding General Practitioner Award—according to Hugh P. Adkins, M.D., Louisville, chairman of the KSMA Awards Committee.

Dr. Adkins urges KSMA members to consider the high distinction of these Annual Meeting presentations and to place in nomination the name of the doctor or doctors within their communities who, by their example of accomplishment and devotion to the practice of medicine and the principles it upholds, are determined most eligible for these Association honors.

"Many Kentucky doctors are worthy of nomination for this recognition," said Dr. Adkins. "It is the responsibility of KSMA members to name them." Dr. Adkins committee will report its recommendations to the House of Delegates at the Annual Meeting. Additional candidates can be nominated from the floor. The awards are presented on the final day of the meeting.

Nominations can be made by contacting Dr. Adkins or any of the members of his committee—R. Ward Bushart, M.D., Fulton, Glenn U. Dorrah, M.D., Lexington, Barton L. Ramsey, Jr., M.D., Somerset, and Edward L. Smith, M.D., Covington.

UL Hospital Alumni to Hold Annual Meeting in June

The Alumni Association of the University of Louisville Hospitals, which holds a meeting annually to honor current house staff members through the presentation of certificates for periods of training, has tentatively set June 21 as the date of this year's meeting.

Sam A. Overstreet, M.D., Alumni president, and Edwin Hawkins, General Hospital director and secretary-treasurer of the Alumni group, are making arrangements to hold the afternoon scientific session at the hospital amphitheatre, followed by a dinner and social hour in the evening at the Standard Club.

The Alumni now includes more than 800 members who are practicing medicine in locations around the world. Of this number, 210 former interns and residents of Louisville General Hospital and Children's Hospital returned last year for the annual get-together.

A full program of the June meeting will be carried in the May issue of *The Journal*.

Color TV Will be Shown at KSMA Annual Meeting

Color television, using the new closed circuit of the Smith, Cline and French Laboratories, Philadelphia, will be shown during the KSMA Annual Meeting, September 17-19.

Rudolph J. Noer, M.D., head of the department of surgery at the University of Louisville School of Medicine, and chairman of the Color TV Program Committee, a sub-committee of the KSMA Committee on Scientific Assembly, is in charge of the television programs.

He states that they will be held from 8:30 to 10:00 a.m. each morning, from 1:30 to 3:00 p.m. on Tuesday and Thursday and that there will be a full hour program on Wednesday from 10:30 to 11:30 a.m.

E. E. Hume, Jr., Installed as KPHA President

Edgar E. Hume, Jr., Frankfort, son of the late Gen. E. E. Hume, Sr., was installed as president of the Kentucky Public Health Association at its annual conference on March 12-15 at the Henry Clay Hotel in Louisville.

J. Homer Holland, Paducah, was named president-elect, Miss Elizabeth Herman, Harrodsburg, vice-president, Mrs. Rosalie Walters, Louisville, secretary, and William A. Kanzinger, Louisville, treasurer.

Cancer control, school health and the future of public health were among the topics discussed. Speakers included John D. Porterfield, M.D., Washington, assistant to the surgeon general of the U. S., Mabel E. Rugen, M.D., professor of health education at the University of Michigan, and Reginald M. Atwater, M.D., executive secretary of the American Public Health Association.

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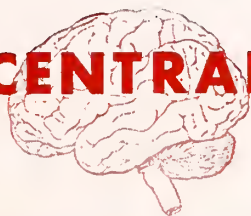
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1. Carter, C. H., and Maley, M. C.: Antibiotics Annual 1956-1957, New York, Medical Encyclopedia, Inc., 1957, p. 51.

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1st Pan-Am Cancer Congress is at Miami April 25-29

The First Pan American Cancer Cytology Congress, sponsored by the Cancer Cytology Foundation of America, Inc., Cancer Institute at Miami, Florida, Southern Society of Cancer Cytology and the University of Miami, will be held at the Eden Roc Hotel at Miami Beach, Florida, April 25-29, 1957

An outstanding medical and scientific program will include such well-known speakers as Paul Aebersold, M.D., Atomic Energy Commission, Oak Ridge; Richard LeLinde, M.D., Johns Hopkins University, Baltimore; and Felix Wroblowski, M.D., Sloan-Kettering Institute, New York. Also listed are many other famous research workers and cytologists from Argentina, Brazil, Peru, France, Canada and Mexico as well as many from research institutes in the United States.

UL Junior is 1st on Med Exam

Alan Bornstein, Louisville, U of L Medical School junior who ranked first in his class in his freshman and sophomore years, made the top score in a national medical-board examination on the basic sciences, the University has announced. Bornstein scored 97.7 (out of 100) to win the high mark among 3,477 students taking the test. Most states, including Kentucky, recognize the national test for licensing.

U of L to Study Twins

One hundred sets of twins will be studied by the pediatrics department of the University of Louisville School of Medicine on a \$10,000 grant from The Courier-Journal and Louisville Times Foundation.

The study will be directed by Alex J. Steigman, M.D., department head, and Frank Falkner, M.D., director of the child-development unit. Attention will center on the physical and intellectual characteristics of the same children as they grow up. Dr. Falkner is international coordinating officer for related studies in London, Paris, Stockholm, Brussels and Zurich.

UL Honor Grad is New Prof

Malcolm M. Stanley, M.D., has been appointed professor of experimental medicine at the University of Louisville School of Medicine, coming from a post he has held since 1954 as associate professor of medicine at Tufts University Medical School, Boston.

The top graduate at the U of L Medical School in 1941, Dr. Stanley will spend about half his time teaching and half in research and to eventually study the causes of ulcerative colitis. He took intern and residency training at George Washington University, Washington, and was an instructor at Boston University Medical School before going to Tufts University.

STUDENT AMA

The method for a medical student's choice of an internship has changed drastically in the past few years, and I want to review the change for those who have not followed it.

The problem arose over supply and demand—i.e. in 1956 there were 11,459 internship positions for 6,821 graduates. Because of this, hospitals were signing up junior and sophomore students to fill their programs in advance. This, of course, led to contract-breaking and its bitter aftermaths.

Therefore, the "Telegraphic Plan" was tried. This way, the senior student applied to hospitals of his choice and then, at a set date and hour, hospitals began calling applicants. An acceptance was a contract. However, this failed because of stalling—the student stalled for a better hospital to call and the hospitals had to stall, waiting for stalling students to decide, before going further down their list.

From this, the N.I.M.P. (National Intern Matching Program) was born. Under this plan the senior student applies to hospitals in the same manner, and then turns in a "Preferential" list of hospitals in the order from most desirable down. The hospital, also, turns in preferential lists, and then the lists are matched by machine. The rule is that the student has complete freedom of choice and is matched with the highest hospital that wants him. If the student is not matched, he is not "placed," but seeks one of the remaining openings on his own, after the matching.

In 1956, 98 per cent of approved hospitals participated and received 70 per cent of their first choices and 21 per cent of their second choices. Ninety-six per cent of the graduates participated, and 82 per cent got first choice and 11 per cent second choice.

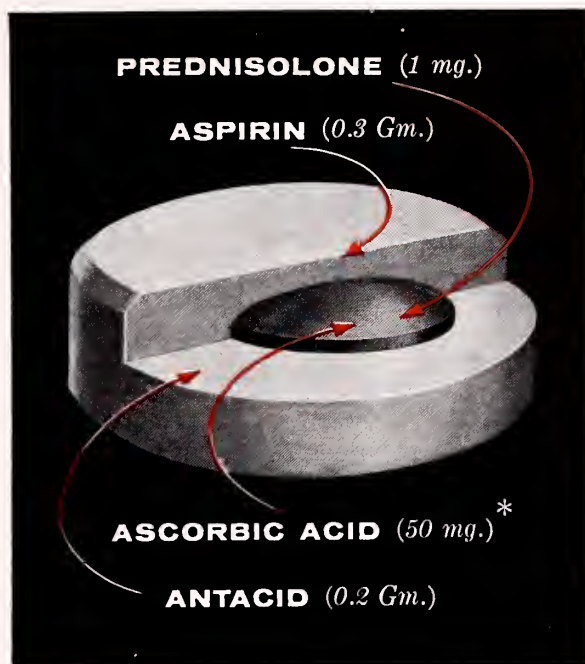
The 1956 class of 92 graduates from the University of Louisville were matched as follows:

Home State	
Ky.	72
N. Y.	5
Ind.	3
Mo.	2
Cal.	2
Va., Ill.	1
S. D., N. M.	1
Ariz., Tenn.	1
N. J., Hawaii	1
Internship State	
Ky.	28
Ohio	13
Mich.	7
Fla.	7
Ga.	5
Cal.	4
Ind.	4
Mo.	3
Texas	3
Md.	3
N. Y.	3
Penn.	3
Va.	2
Tenn.	2
Ill.	1
Ariz.	1
Wash.	1
Minn.	1
Hawaii	1

Of these, eleven were military—Navy, 6; Army, 4; Public Health, 1. Louisville General has two interns from the class of 1956.

This is quite a change from "the old days." For those of us who are in the midst of it, it is a great step forward.

Robert G. Overstreet, President
U of L Chapter, Student A.M.A.



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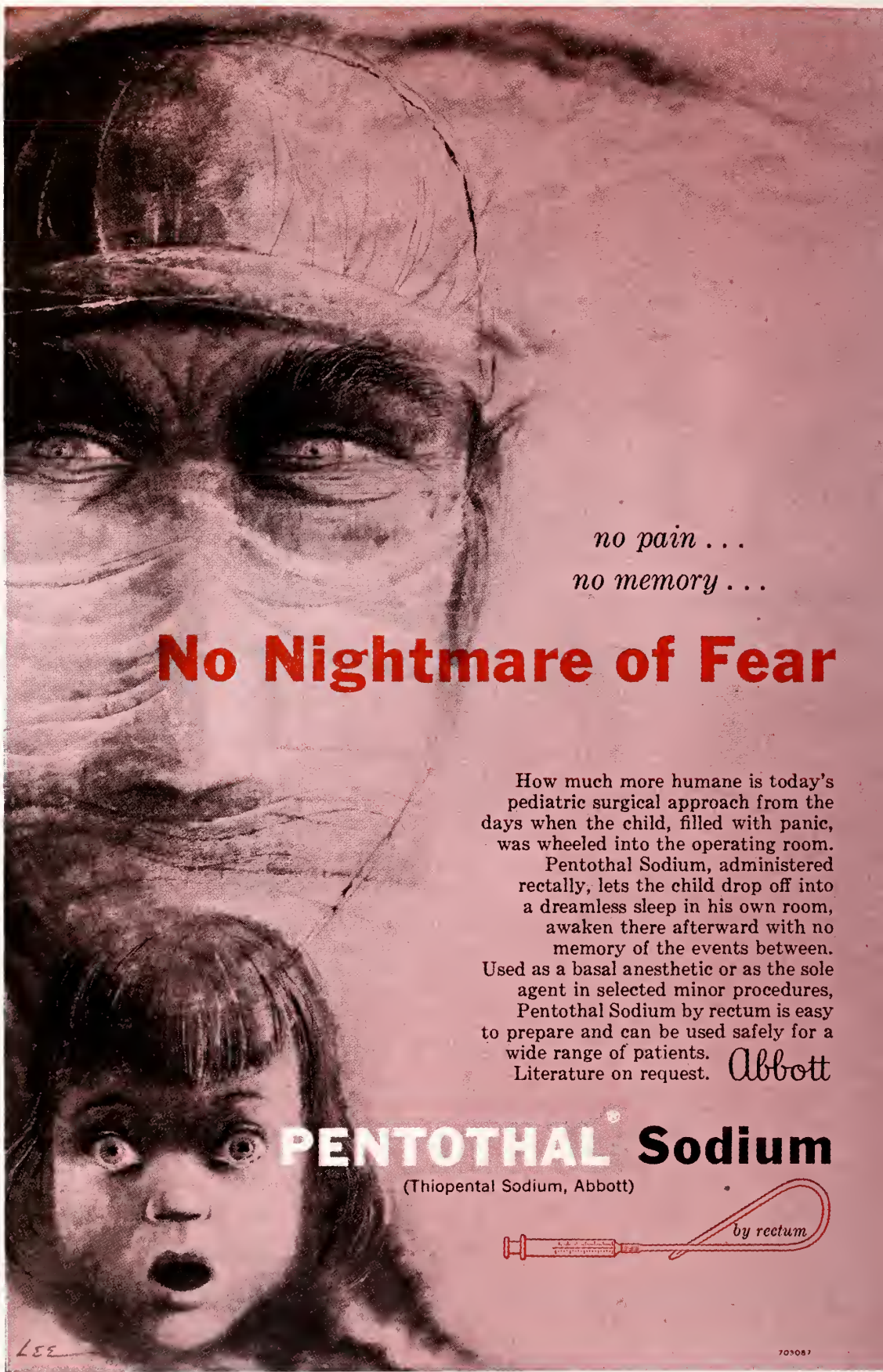
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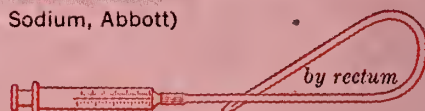
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Kentucky State Medical Association

Columbia Auditorium

Louisville, Kentucky

September 17, 18, 19

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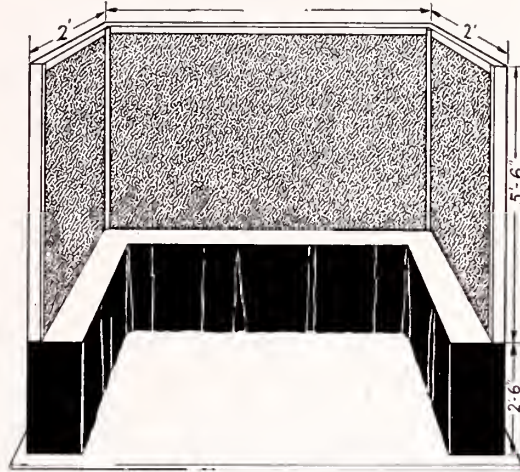
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Louisville General Hospital,

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Dimensions and structure of K.S.M.A. Scientific
booth are shown in accompanying illustration



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3. Will you require shelf space?
4. Give approximate amount of wall space needed. (Included in total space is two side walls of two feet in length)
5. Name of institution co-operating in the exhibit (if desired)
6. Name of exhibitor:
- (Street & No.) (City)

The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.

In Memoriam

WILLIAM D. HENRY
Crutchfield
1866 - 1957

One of West Kentucky's oldest active physicians, Dr. Henry, 90, died February 18 at his home. He had practiced medicine in Crutchfield and the surrounding community since early manhood, limiting his activity to office calls during the past 15 years.

A native of Graves County, Dr. Henry received his medical education at the University of Louisville Medical Department, where he graduated in 1898.

ALBERT PORTER DOWDEN
Louisville
1876 - 1957

Dr. Dowden, 81, formerly of Eminence, died February 28 at his home after a six weeks illness.

A graduate of the University of Louisville Medical Department in 1900, Dr. Dowden served his internship at SS Mary and Elizabeth Hospital, and began a practice of medicine at Eminence in 1901 which continued until his retirement in 1947. He served several terms as Henry County coroner and was on active duty in the Army Medical Corps during World War I.

CASSIUS A. BOONE
Louisville
1887 - 1957

A practicing physician of Louisville for 43 years, Dr. Boone, 69, died of a heart attack in an Orlando, Fla., hospital on February 27. A native of Orlando, he had been wintering there from his Kentucky practice, where he served on the staffs of St. Anthony and Kentucky Baptist hospitals and Norton Memorial Infirmary.

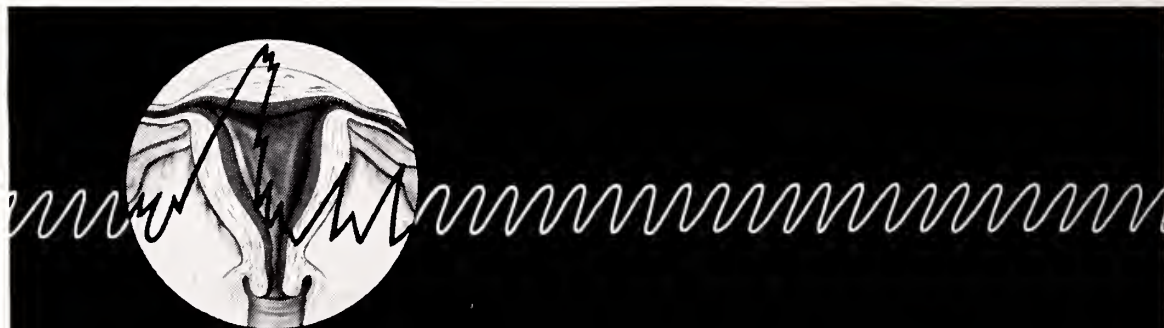
Dr. Boone came to Louisville in 1909 to enter the University of Louisville Medical Department. He was graduated in 1919 and soon established offices in the Francis Building where he had since practiced.

THOMAS R. COLLIER, M.D.
Whitesburg
1890 - 1957

A heart attack claimed the life of Dr. Tom Collier on February 21 at his home at Whitesburg. A native of Virginia, he had been practicing medicine in Letcher County since 1920, and in Whitesburg for the past 20 years.

Dr. Collier graduated from the University of Louisville Medical Department in 1918, following which he served in the U. S. Army Medical Corps until the end of World War I. He was widely known for his charitable work.

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SEARLE

GUY ECKMAN**Covington****1874 - 1957**

A veteran of 40 years medical practice in Covington, Dr. Eckman, 83, died February 12 at Booth Hospital, Covington, where he had been a patient since 1952.

Dr. Eckman was a graduate of the old Medical College of Ohio in 1895. During his years of active practice he served as a local health officer and member of the Board of Health, and was active in the promotion of obligatory diphtheria shots, health examinations for food handlers, and grade A milk ordinances in his area.

WINFIELD SCOTT ALLPHIN, M.D.**Georgetown****1880 - 1957**

Dr. Allphin, 76, a Georgetown physician for 53 years and president of its First National Bank, died at St. Joseph Hospital, Lexington, February 17. He had been in ill health two months.

A native of Grant County, Dr. Allphin received his medical education at the Louisville Hospital College of Medicine, where he graduated in 1904.

FLOYD K. FOLEY**Owensboro****1885 - 1957**

A former superintendent of Eastern and Western State Hospitals, Dr. Foley, 71, died February 3 at the Veterans Hospital in Louisville. He was a native of Muhlenberg County and was graduated from the University of Louisville Medical Department in 1911.

Following his graduation, he practiced medicine in Central City from 1911 to 1930 when he moved to Washington to serve on the staff of the Pension Bureau for three years. Upon his return to Kentucky he was resident physician at Veterans Hospital, Lexington, prior to his affiliation with the State hospitals.

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THE DEAN, 345 WEST 50th St., New York 19, N. Y.

A woman with dark hair, wearing a white long-sleeved shirt and dark, worn-in pants, is standing on a wooden step ladder. She is holding a paintbrush in her right hand and is in the process of painting the ceiling. A single light bulb hangs from the ceiling. The room has yellow walls and a wooden door is visible on the right. A paint bucket and some tools are on the floor near the ladder. The overall style is that of a watercolor or a soft-focus photograph.

Mom “wears
the pants”
once too
often

frozen shoulder

Bursitis and tenosynovitis are new terms to home-makers, but they are not uncommon sequels to over-exertion. Early antirheumatic therapy is to be encouraged in the treatment of these conditions, as it is in more serious rheumatic conditions, to alleviate pain and prevent progression of the disorder. With adequate therapy the prognosis of bursitis in its acute stage is good. Delaying therapy may result in extension of the inflammation and gross anatomical changes that tend to incapacitate the patient.

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News Items

R. G. Calloway, M.D., recently began a practice at Shively. Dr. Calloway had practiced in Louisville since last January when he moved from Berea, where he has been in private practice. A graduate of the University of Louisville School of Medicine in 1955, Dr. Calloway served his internship at St. Joseph's Infirmary.

Wendell Hurt, M.D., has completed two years of active duty in the U. S. Air Force and will enter general practice of medicine at Tompkinsville, where he will be associated with T. L. Carter, M.D. Prior to his discharge Dr. Hurt was in charge of the Flight Surgeon's Office at Williams Air Force Base in Arizona. Dr. Hurt was graduated from the University of Louisville School of Medicine in 1953 and served his internship at St. Joseph's Infirmary in Louisville.

B. P. Jones, M.D., was recently honored by the Barbourville Kiwanis Club for fifty years of continuous medical practice in Barbourville and Knox County. A native of Oneida, Dr. Jones was the first person from Clay County to receive a medical degree. He was graduated from Kentucky University Medical Department in Louisville in 1906. Still active in his practice, Dr. Jones has delivered some 6,000 babies.

Ramon Sanchez Vinas, M.D., of San Juan, Puerto Rico, an obstetrician and gynecologist, began practice in St. Matthews in January. He is sharing office space with Charles E. Pearce, M.D. Dr. Vinas received his medical training at the University of Syracuse, Syracuse, N. Y., where he graduated in 1952. He served two years of his gynecology and obstetrics residency at the New York State Medical Center at Syracuse and completed his last year of training at St. Joseph's Infirmary in Louisville in 1956.

In expanding its cardiovascular program, the National Jewish Hospital at Denver is considering applications for admission of patients suffering from cardio-vascular defects amenable to surgical intervention. Patients are accepted regardless of race, religion or national origin, without charge. Definitive diagnosis is not necessary. Only those unable to pay for private care are eligible. Write to Medical Director, National Jewish Hospital, Denver 6, Colo.

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IRA O. WALLACE, Administrator

News Items

Thomas D. Yocum, M.D., has been named chief surgeon of the Shriners' Hospital for Crippled Children at Lexington to succeed Kearns Thompson, M.D., whose resignation was effective April 1. Dr. Yocum, a graduate of the University of Rochester Medical School, has practiced in Lexington since 1953. He interned at Barnes Hospital, St. Louis, and received orthopedic training at Providence Hospital, Seattle, Harvard University and the State Crippled Children's Hospital, Gastonia, N. C. Dr. Thompson had been associated with the Shriners' Hospital since 1948. His assistant, Carl M. Friesen, M.D., also tendered his resignation at the same effective date.

Claude E. Cummins, Jr., M.D., formerly of Marlow, Okla., has joined the staff of the Maysville clinic and will be associated in the practice of medicine with Mitchell B. Denham, M.D., Harry C. Denham, M.D., and George Estill, M.D. Dr. Cummins was associated with a clinic and hospital in Oklahoma prior to coming to Kentucky.

B. F. Brown, M.D., Owensboro, is now serving as health officer for Daviess, Hancock and McLean counties. He will also serve as medical director of the Owensboro-Daviess County Health Department. Dr. Brown recently returned from active duty in the U. S. Naval Reserve where he was with the Second Marine Division at Camp Lejeune, N. C. A graduate of the U of L School of Medicine in 1953, Dr. Brown interned at Kentucky Baptist Hospital and practiced at Harrodsburg from the completion of his internship until entering the armed forces.

Harold J. Pilon, a native of Canada who worked from 1950 to 1952 as administrator of the Logan County Hospital at Russellville, has been named director of hospital administration for the Kentucky Department of Mental Health. He succeeds John Stanley. H. L. McPheeters, M.D., public-health commissioner, said Pilon's selection was part of a program to add trained, nonphysician, administrators to the staffs of the four State mental institutions to free doctors for medical duties.

Mrs. Nathan Canter, wife of an Owensboro physician, is making the race for County Commissioner of Daviess County, in the Democratic primary election to be held in May. Dr. Canter is an orthopedist in Owensboro.

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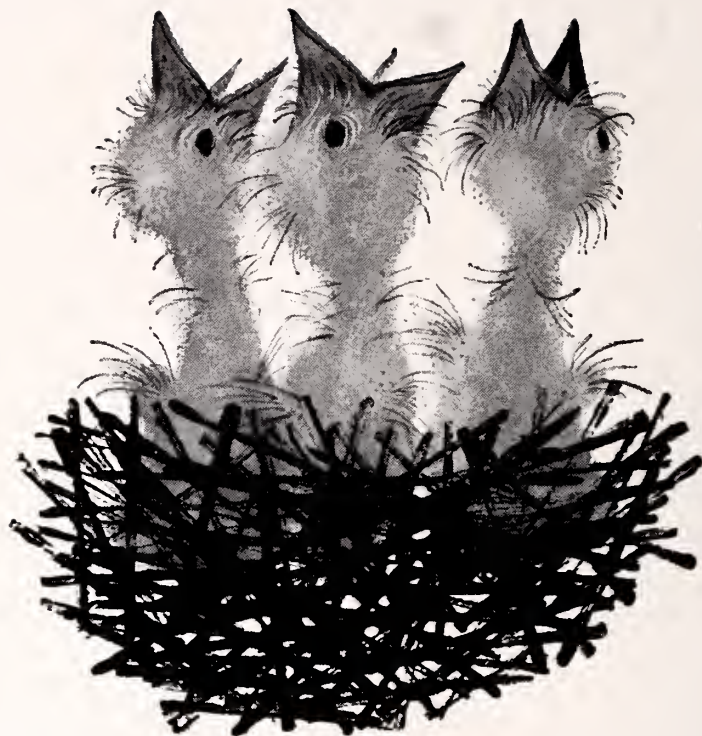
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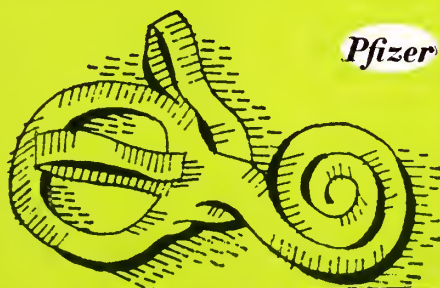
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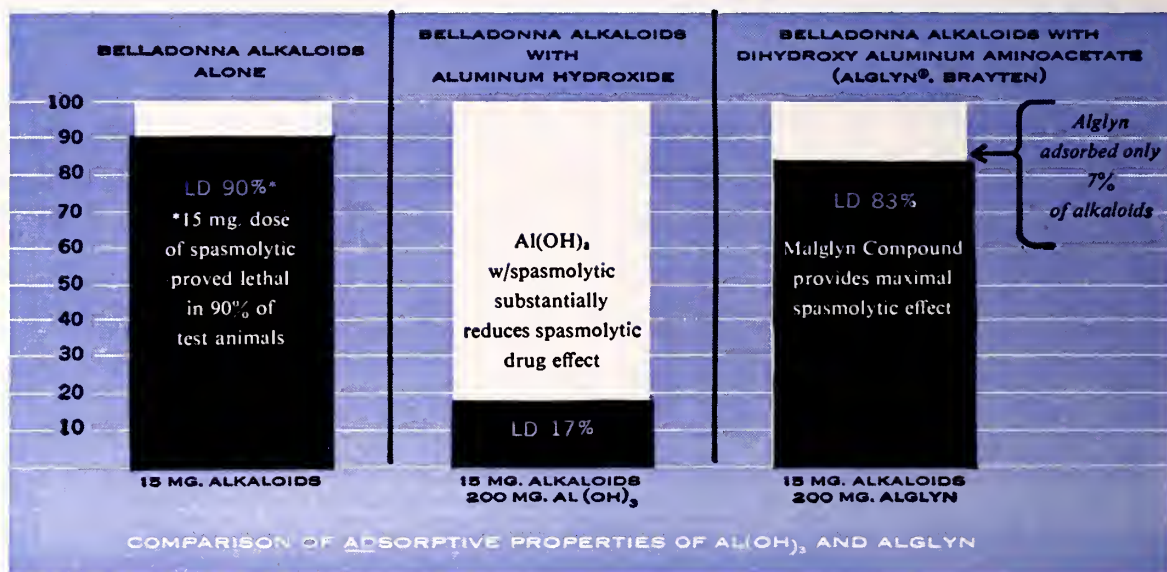
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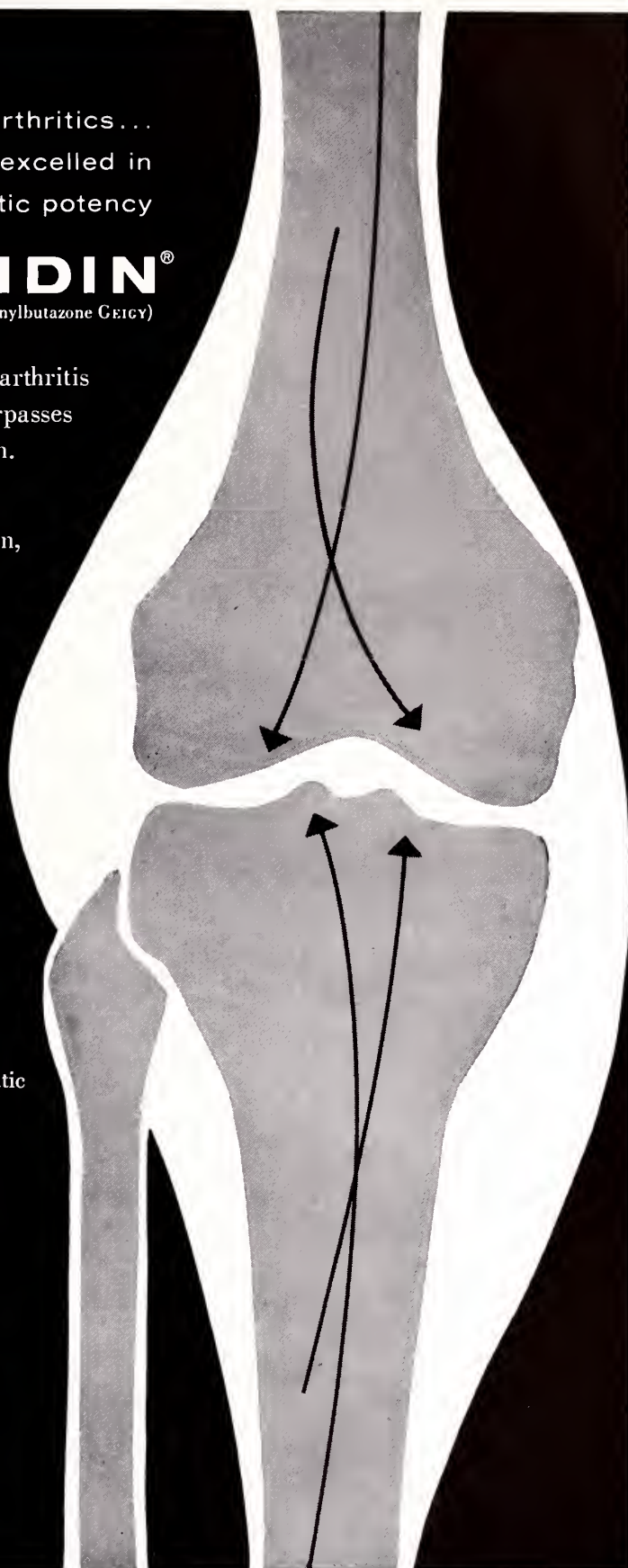
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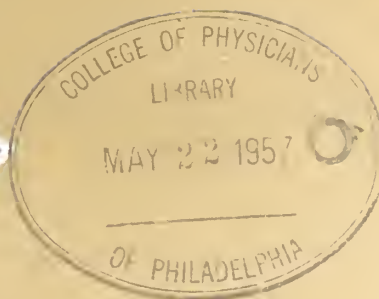
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1. Knoch, H.R., and Kirk, R.: Prochlorperazine—A New Agent for the Treatment of Psychic Stress, in manuscript.

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THE JOURNAL

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In this issue:

Caesarean Sections

Cancer of the Gall Bladder

Thrombotic Thrombocytopenic Purpura

CLINICAL EXPERIENCE INDICATES FEWER RESISTANT STAPHYLOCOCCI CHLOROMYCETIN

As clinical reports on resistance of common pathogens to antimicrobial therapy gain increasing prominence,¹⁻⁵ need for broad-spectrum antibiotic therapy to which resistance is less likely to develop becomes even more apparent. Particularly troublesome are the staphylococci, which often fail to respond not only to commonly used antibiotic therapy but also to agents more recently introduced.⁶⁻¹⁰

CHLOROMYCETIN (chloramphenicol, Parke-Davis) has maintained most of its original effectiveness against strains of staphylococci and against other sensitive pathogens.^{2-4,11-15} "The fact that so few strains were found to be resistant to chloramphenicol [CHLOROMYCETIN] made it possible for the clinicians to turn to this antibiotic when such a large proportion of strains was observed to be highly resistant to the other commonly used antibiotics."²

CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

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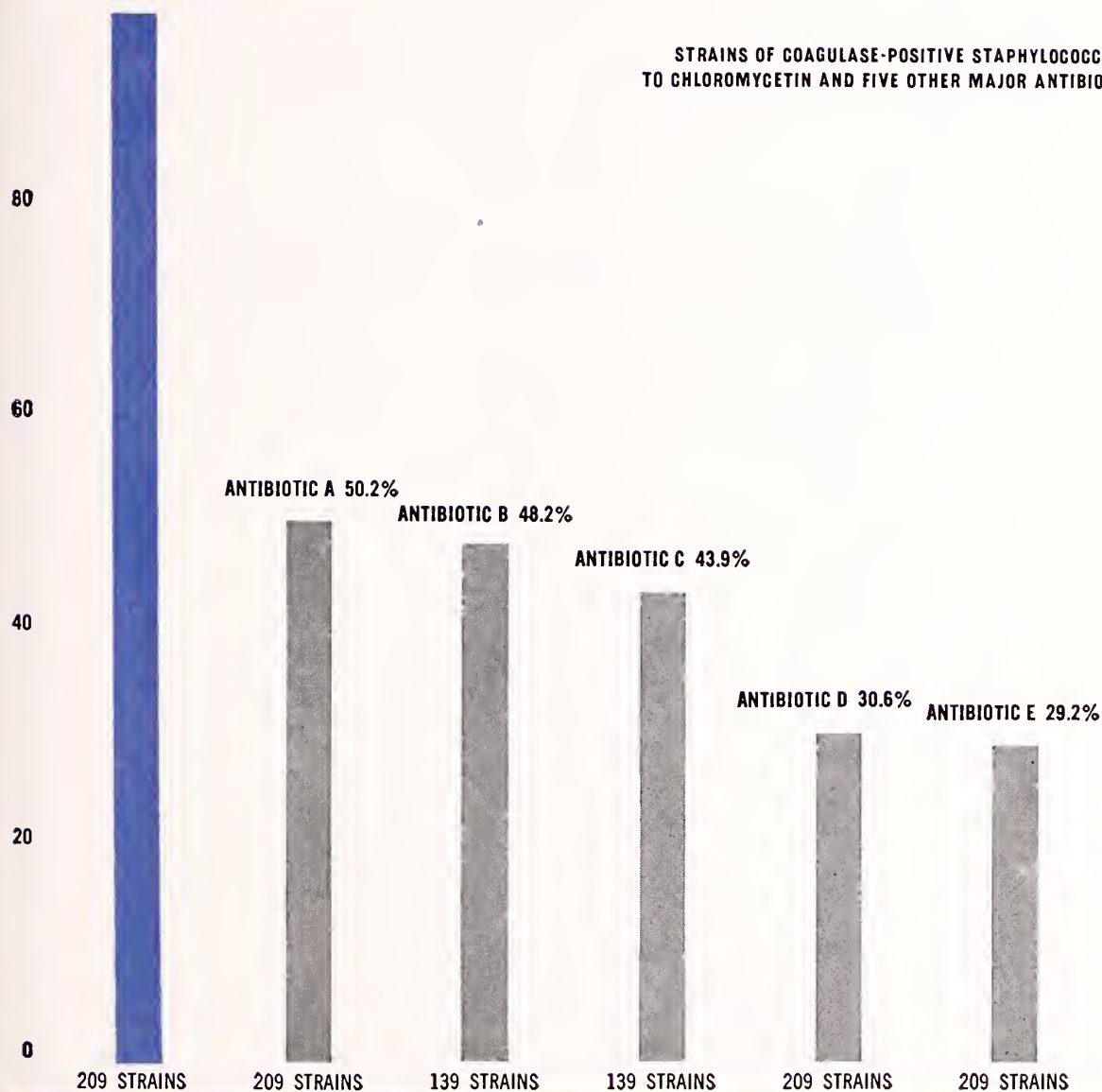
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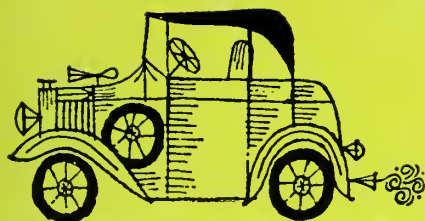
**message
from
the
President**

You, we believe, will agree that it behooves every member of this Association and especially every delegate to the Annual Meeting to inform himself the best he can of the situation that now exists in Eastern Kentucky. In certain sections there is active disagreement among physicians as to whether or not ethical medicine is being practiced as a result of the operation of a labor-management sponsored health and welfare plan.

Your council and two committees have spent days and nights listening to both sides but we have not been able to come up with an adequate answer. We believe we owe these physicians an answer and surely we cannot give one unless we know all the facts. All of you must have a friend or a classmate in Eastern Kentucky that you could write or better yet go see in this connection. In this way you could obtain first-hand information that would enable you to act more intelligently on several resolutions which are expected to be presented at our Annual Meeting in September.

The situation that exists among the physicians in Eastern Kentucky may well be faced by physicians in other parts of the State in the near future and for this reason we believe each county society should, if possible, instruct its delegate concerning this important question.

R. R. Slucher



BONAMINE*

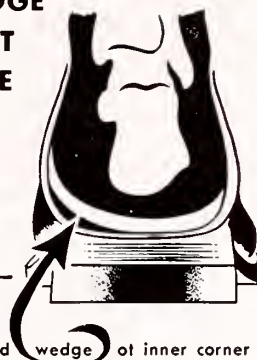
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The Kentucky Physicians' Placement Service is operated by the KSMA for the purpose of assisting physicians looking for locations and communities needing physicians to get together. For more information on the listings below, write: Kentucky Physicians' Placement Service, 620 South Third Street, Louisville, Ky.

Physician Wanted

Western Kentucky town and community of over 3500 desires physician to take over busy general practice of doctor leaving for military service in mid-summer. Office and equipment are available.

PW 119

Western Kentucky community with trade area of 15,000 wants a general practitioner. Sixty miles from a city of approximately 50,000. Elementary and secondary schools. Hunting, fishing, golf courses and recreation grounds in close proximity.

PW 120

General practitioner needed in community of 1300 population. No physician located here at the moment. Office and housing space available. Secondary schools and numerous churches.

PW 121

Community in Northern Kentucky is in need of a general practitioner. No physician located here now. Housing, schools and churches available. This is a farming community, together with industrial workers who commute to a city nearby.

PW 122

Community in the middle of the Blue Grass Section of Kentucky is in need of a general practitioner. There is no physician in this farming community and housing and office facilities can be arranged.

PW 123

General practitioner needed in small community in Western Kentucky. Schools and churches available. Housing and office space can be had. Farming and industrial work are principal sources of income.

PW 124

Centrally located community with one physician in attendance would like a general practitioner, with some surgery, to associate. This is an established practice.

PW 125

Clinic in Western Kentucky community of approximately 20,000 would like an associate for the practice of pediatrics. Excellent opportunity for young physician.

PW 126

Locations Wanted

University of Louisville School of Medicine graduate of 1956 is interested in doing general practice as an associate or in a clinic in Kentucky. Presently in Navy but will be available June, 1957. Married, Protestant and 35 years of age.

LW 127

An internist wishes to establish practice with group or clinic. Graduate of Baylor College of Medicine in 1949, with 3 years of residency. Available June, 1957.

LW 128

Louisiana State University School of Medicine graduate of 1953 would like to establish in the field of general practice. Completed general practice residency, 29 years of age and single.

LW 129

Graduate of University of Cincinnati College of Medicine, 1950, will be available July, 1957, to practice internal medicine and chest diseases. Four years residency in internal medicine. Board eligible for American College of Physicians.

LW 130

Graduate of Medical College of Georgia in 1953 is interested in general practice and surgery either in a clinic or as an associate. Will be available about the middle of August, 1957.

LW 131

Available in June of 1957, a general surgeon who is a graduate of the University of Rochester School of Medicine in 1944. Presently in service. Board eligible in surgery.

LW 132

University of Arkansas School of Medicine graduate of 1932 interested in doing general practice. Draft exempt and available at any time. Board eligible in psychiatry.

LW 133

University of Louisville graduate of 1954 will be available in July of 1957 to practice pediatrics in Kentucky. Two years pediatric residency. Thirty-two years of age.

LW 134

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¹. Personal communications

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On Self-Regulated Schedules For Infants

Genetically acquired behavioral predispositions enable the normal baby to regulate its feeding intake and periodic hunger sensations, its feeding habits. These physiological regulatory forces may be satisfied by adapting the formula content and feeding period to the individual needs of the infant. It involves a sensible compromise between too rigid a schedule, geared to the clock and too lax a schedule, based on self-demand feedings. Such is the current objective: for either extreme can lead to infant feeding difficulties.

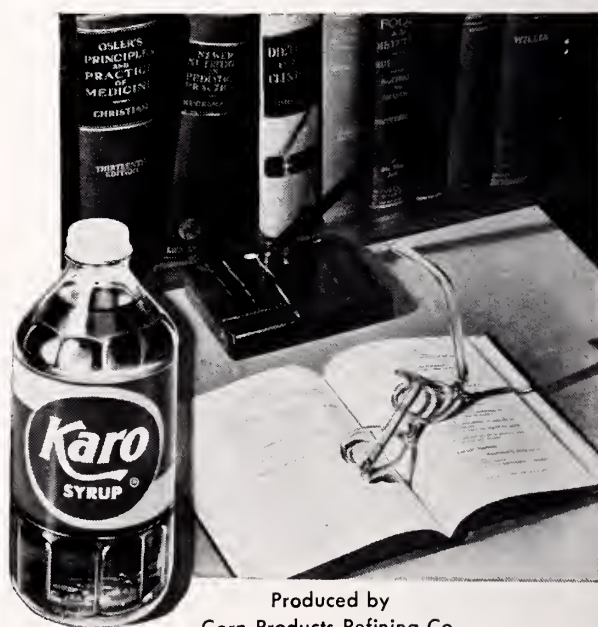
The newborn may become a feeding problem if the prescribed formula is excessive or the feeding schedule rigid. Every time he is awakened abruptly from satisfying slumber to be fed forcefully, the baby gradually loses his enthusiasm for the food and begins to resist the feeding. The young infant may balk at the crude introduction of a new food or feeding procedure without the proper prelude of gradual adaptation of taste, color, consistency and quantity.

The older infant weaned from bottle to cup may reject milk or go on a hunger strike. Devoted to his bottle he resents its sudden deprivation. It takes a certain readiness for weaning to make that change agreeable. Later the infant becomes somewhat independent of his mother and arbitrary with his food. What he enjoyed yesterday, he rejects today. If he distorts the diet for a day and his mother resorts to force, a feeding problem is in the making. Sensible decorum will solve these

little difficulties before they become big behavior disturbances in childhood.

The problems of infant feeding are always the same but solutions may differ with each era. The carbohydrate requirement for all infants is as completely fulfilled by KARO® Syrup today as a generation ago. Whatever the type of milk adapted to the individual infant, KARO may be added confidently because it is a balanced mixture of low sugars, easily mixed, well tolerated, palatable, hypoallergenic, resistant to fermentation, easily digestible, readily absorbed, non-laxative. Readily available in all food stores.

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PUBLIC HEALTH PAGE

MATERNAL MORTALITY IN KENTUCKY

RUSSELL E. TEAGUE, M.D.

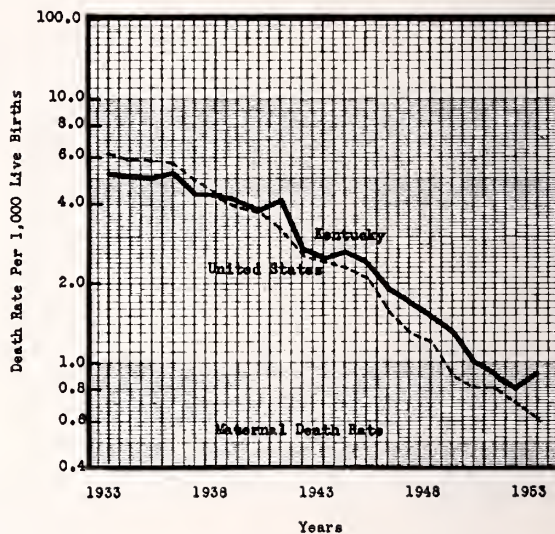
Commissioner of Health

State of Kentucky

IN recent years maternal mortality in Kentucky has declined markedly as it has throughout the country. Our records show that there were 344 maternal deaths in 1930; in 1955 there were 41. Although this decrease is gratifying it can be improved. This is demonstrated by the fact that Kentucky's rate of maternal mortality (7/10,000 live births) exceeds that of the nation as a whole (6/10,000). It is demonstrated even more clearly by the fact that some states have succeeded in reducing their rates even more. Some have rates as low as 1/10,000. This would appear to be approaching the so called "irreducible minimum," toward which we should strive.

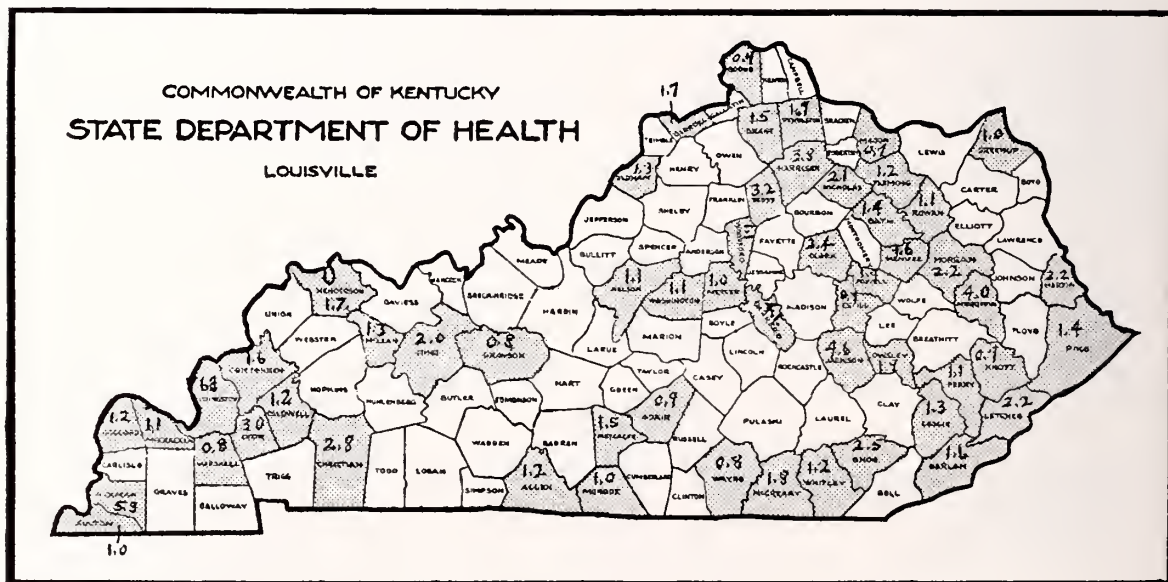
Through the years, as the rates have fallen the causes of maternal mortality have also undergone a change. The greatest change in both rates and causation was accounted for by the discovery of the antibiotics, since this meant that the dreaded "puerperal sepsis" was brought under control. Infections of childbirth and the puerperium, once the leading cause of maternal deaths, have now dropped to third place. Another change which has been brought

about by improved diagnosis and treatment during the prenatal period is a decrease in the number of deaths resulting from toxemia, with



MATERNAL DEATH RATES PER
1,000 LIVE BIRTHS FOR KENTUCKY, 1933-1953

the result that postpartum hemorrhage is now the leading cause. There is little doubt that the
(Continued on Page 452)



COUNTIES IN KENTUCKY WITH MATERNAL DEATH RATES HIGHER THAN NATIONAL AVERAGE (0.6)

1953 - 1955

Meat...

Good Nutrition and the

Metabolic Changes of Adolescence

The sharp increase in nutritional requirements during adolescence is ascribed to the rapid growth, restless activity, high basal metabolism, and increased rate of organ development during this period.^{1, 2} Nutrient needs during adolescence are higher than at any other period of life³ except for pregnancy and lactation.

In order to satisfy these extremely high nutritional requirements, "protective" foods supplying liberal amounts of protein, vitamins, and minerals should predominate in adolescent diets.³ Such foods include meat, poultry, fish, milk, eggs, vegetables and fruits, and whole-grain or enriched cereals and enriched bread. Accessory foods commonly eaten by adolescents to satisfy emotional needs may provide energy, but are commonly responsible for obesity and should not take the place of the "protective" foods.

Meat contributes much toward making the daily meals of adolescents appetizing, ample, and satisfying as well as adequate in protein, B vitamins, iron, phosphorus, potassium, and magnesium. Its complete protein functions in all physiologic mechanisms utilizing protein—tissue growth and replacement, fabrication of enzymes, hormones, and antibodies, and maintenance of the body's fluid balance. Its B vitamins and minerals take part in many processes of intermediate metabolism important in body development.

1. Toverud, K. U.; Stearns, G., and Macy, I. G.: *Maternal Nutrition and Child Health. An Interpretative Review*, Washington, D.C., National Research Council, National Academy of Sciences, Bull. No. 123, 1950, p. 115.
2. Proudfit, F. T., and Robinson, C. H.: *Nutrition and Diet Therapy*, ed. 11, New York, The Macmillan Company, 1955, p. 271.
3. Martin, E. A.: *Roberts' Nutrition Work with Children*, Chicago, The University of Chicago Press, 1954, pp. 231-236.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

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1957 Annual Meeting

Kentucky State Medical Association

Columbia Auditorium

Louisville, Kentucky

September 17, 18, 19

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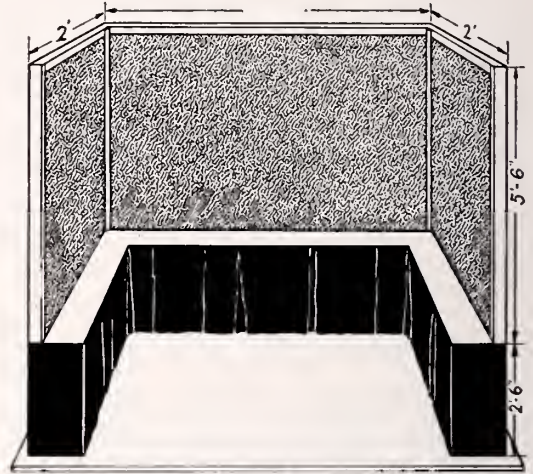
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WASHINGTON NEWS DIGEST



Washington, D. C.—By approximately the mid-term point in its first session, the 85th Congress had shown enough interest in health legislation to hold a variety of hearings, but there was no evidence that many major bills would be passed before adjournment.

Actually, it was not until three months after the session opened that the Administration sent up to Congress two bills it regards as important—one would change the doctor draft act and the other would authorize small commercial companies to pool part of their resources to stimulate expansion and experimentation in health insurance.

Even then, the Department of Health, Education, and Welfare had not released its draft of legislation for federal grants to medical, dental and osteopathic schools for construction and equipment. On this, there was some reluctance to act until Capitol Hill had decided on the administration's bill for U. S. aid to general education.

Of all these bills, indications were that progress was assured on only one, that providing some revised arrangement for the selective draft of physicians, dentists and "allied specialists." The special doctor draft act, in effect for almost seven years, is scheduled to expire on July 1. Because Defense Department insists it still needs special authority to draft physicians and other professional health personnel by professional classification, the alternative was continuation of a modified doctor draft act or changing the regular draft act.

Meanwhile, a number of other bills had been studied at hearings. They include:

Changes in medical aspect of civil aviation regulations. Witnesses are widely divided on this measure, that would set up an Office of Civil Aviation Medicine within the Civil Aeronautics Administration and give the Air Surgeon General who would head the office considerably more authority than now is exercised by U. S. medical officials in this field. There was no official sponsorship of this from the federal governmental level. It was opposed by the Department of Commerce (where CAA is located) and the Civil Aeronautics Board. However, support came from the outside, including testimony from Jan Tillisch, M.D., of the Mayo Clinic, William Ashe, M.D., chairman of the department of preventive medicine, Ohio State University, and Herbert F. Fenwick, M.D., president of the Civil Aviation Medical Examiners. Dr. Tillisch headed an AMA ad hoc committee that had started a study of the problem, but he testified as an individual.

Veterans medical care. The House Veterans Affairs Committee had held extensive hearings on a bill to further restrict admission of non-service connected cases to Veterans Administration hospitals, but there

were no developments beyond that to encourage sponsors of this legislation.

Civil defense reorganization. Here again a wide split developed at the hearings on just how to reorganize the federal government's participation in civil defense. The Administration wanted to strengthen the U. S. civil defense arm (the Federal Civil Defense Administration), but without going to the extent of making a cabinet-rank Department of Civil Defense, which is the goal of Chairman Chet Holifield (D., Calif.) of the subcommittee that had studied civil defense for more than a year.

Control of barbiturate and amphetamine drugs. The objective of bills before the House Interstate health subcommittee is to extend federal control to take in the manufacture, compounding, processing, distribution and possession of habit-forming barbiturates and amphetamines. This would be achieved by demonstrating that intrastate control of the drugs is essential to achieve interstate control, a philosophy advanced for years by some federal officials.

While manufacturers, compounders, processors and handlers would have to list their names and places of business with HEW and to maintain complete records, physicians would not have to comply with these regulations.

Pressures for economy that had been evident early in the session seemed to lose their effectiveness when Congress really set to work on the budget for the Department of Health, Education, and Welfare. Whereas in first (non-record) votes the House cut scores of items, it simply reversed itself when roll-call votes were demanded in the final go-around.

As an example, no reductions at all were made in funds for the research institutes, \$50 million was restored for grants to help build water pollution treatment plants, \$1.3 million was restored to the Food and Drug Administration. A \$5 million cut in money for general public health grants to states was sustained by the House—but this money will have to be provided later if the House estimate of the extent of the obligation proves too low.

Economy advocates tried without success in the House to cut \$21 million off money for the Hill-Burton hospital construction program.

While in theory the Senate is privileged to make its own cuts in a money bill coming to it from the House, in practice the Senators generally restore much of the money cut by the House and occasionally (as last year) vote large boosts over House figures. So the possibility now is for even higher health and medical budgets before the appropriations bills finally are enacted.



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IN THE BOOKS



THE PHYSICIAN-WRITER'S BOOK . . . TRICKS OF THE TRADE OF MEDICAL WRITING: by Richard M. Hewitt, M.D. Published by W. B. Saunders Company, Philadelphia, Penn., 1957. 415 pp. Price \$9.

With wit and with judgment based on long experience as editor and consultant, the author achieves his announced purpose "to aid the inexperienced, in-expert, occasional physician-author, whose material is written for other physicians." Aphorisms and examples are effectively chosen from a wide variety of writers, including Democritus, Homer, Cervantes, Ian Maclaren, Dickens, Morris Fishbein and Alan Gregg. So thoroughly sugar-coated are Dr. Hewitt's pills that the entire book may, contrary to his expectation, be read with pleasure from beginning to end. Even the experienced, supposedly expert physician-author (What, by the way, are the criteria of expertness in authorship?) will find food for thought.

Either kind of reader could wish that Dr. Hewitt were consistently attentive to his own admonitions. For example, Chapter 33 and Appendix XIX are devoted to tautology, or what Dr. Hewitt calls the "tonorial barbershop construction." In both places considerable space is given to tautology resulting from inattention to the origin of words. The expression "fundamental basis" is denounced because *fundamentum* means base; bleeding should not be called a cardinal symptom, because cardinal means red. Yet Dr. Hewitt is quite willing to aid the "inexperienced, inexpert" author, despite the fact that the first adjective is the present and the second the past participle of the verb *experiri*, so that Dr. Hewitt offers, in effect, to aid the author who is *without experience without experience*. Physician, heal thyself!

In the chapter on "Medicalese" there is blanket condemnation of telegraphic expressions which are widely accepted, and to avoid which cumbersome circumlocutions are necessary. The purist may well object to the statement "The fractional test meal showed no free hydrochloric acid," even though it does not, because of the vagaries of English construction, necessarily mean that the meal is fractional, but could equally well mean that the test is fractional. If one wished to hew close to the line, it would have to be admitted that a test meal, being an inanimate object, could hardly be expected to *show* anything, but by these criteria it could not *disclose* anything either. Dr. Hewitt's revision of the statement: "Analysis of fractions of gastric content after a test meal did not disclose the presence of free hydrochloric acid" is longer, less specific since the test meal is not defined, and, in this reviewer's opinion, is a dubious improvement.

The same kind of meticulousness causes Dr. Hewitt concern when the term *hematocrit* is used to mean

the value obtained rather than the instrument used. He finds himself in a morass of difficulties with the word *inject*: he is unwilling to say that a patient was injected, because obviously the patient was not *thrown into* something; to say that something was *injected into* a patient is equally objectionable because he has used the preposition *in* twice. The life of a purist must be hard! The reader may be confused to find such expressions included in a list of obvious mis-usages such as that of *desecrate* in place of *desiccate*, and *fortnitos* in place of *fortunate*. And what, after all, is wrong with *left thorax* and *right thorax* when all of us who use the terms are agreed that there are not really two thoraces?

An outline of some kind is indispensable, and Dr. Hewitt's detailed discussion of outlining in one of his longest chapters will undoubtedly be helpful. But the bare bones of an outline should not show through the finished product. The reader may wonder what happened to the flesh and clothing in some of the one- and two-page chapters in Dr. Hewitt's book, such as Chapter 1, on selection of the subject; and Chapter 18, on good usage.

A book to read and enjoy, to argue with, and at times to disagree with; but in any event to think about in connection with medical writing.

Hampden C. Lawson, M.D.

MANUAL OF ANESTHESIOLOGY: from the Anesthesiology Service, the Presbyterian Hospital and Dept. of Anesthesiology, Columbia University. Authors: Schwartz, H., M.D., Ngai, S. H., M.D., Papper, E. M., M.D. 170 pages. Published by Charles C. Thomas, Springfield, Ill. Price—\$4.75.

This small book is based upon the manual used for indoctrination of resident trainees in anesthesiology at Columbia University and the Presbyterian Hospital, New York City. It was written primarily as an introductory textbook for medical students and hospital residents.

The twenty-two brief chapters cover the basic aspects of every phase of anesthesiology: records; *signs* of anesthesia; the *physiology* of respiration, circulation, and the autonomic nervous system; *anatomy* of the respiratory system; *physics* pertaining to anesthetic apparatus and flows of gases; *techniques* of intravenous, inhalation, rectal, spinal and nerve block anesthesia; *principles* of pediatric anesthesia, obstetrical anesthesia, anesthesia for surgical emergencies, and resuscitation; *complications* of anesthesia; and *fire* and explosion hazards.

The manual serves its purpose well. It would be of interest chiefly to medical students and those physicians beginning the study of anesthesiology.

ROBERT P. BERGNER, M.D.

THE CARE OF THE EXPECTANT MOTHER: Josephine Barnes, D.M., F.R.C.S. (Engl), F.R.C.O.G. Published by the Philosophical Library, New York. 270 pages. Price—\$7.50.

This 265-page-book written by a British obstetrician serves well the purpose for which it was written, namely, a brief concise review for the lecturing obstetrician, textbook for midwives and student nurses, and reference for the occasional accoucheur.

The chapters dealing with embryology, anatomy and physiology are probably too brief and incomplete to adequately understand the pathologic variations in labor and anomalies encountered in an average obstetrical practice.

Explanation of the Rh factor, pregnancy tests, and methods of testing for albuminuria are very well done in a chapter entitled Special Investigations. These could probably be understood by the average lay person.

British conservatism is evident in Advising the Mother and I doubt that any American woman would adhere to the diet and restrictions placed on her by this regime.

Preparation For Childbirth deals mainly with techniques to insure breast feeding and "natural childbirth." References for reading about natural childbirth are the only references used in the entire book.

One chapter deals with maternity services in Britain describing the fees paid the doctor and patient and the forms necessary to receive these benefits.

The last two-thirds of the book deals with abnormal pregnancy, diseases complicating pregnancy, and induction of labor. A conservative approach is maintained throughout, debatable issues and theories are avoided, and nothing is included which is not found in any standard textbook of obstetrics.

It is this reviewer's opinion that this book adds nothing to the already huge supply of obstetrical textbooks.

ED MASTERS, M.D.

MODERN CLINICAL PSYCHIATRY: by Arthur P. Noyes, M.D. Supt. Norristown State Hospital, Norristown, Pa. 4th edition, published 1956 by W. B. Saunders Co., Philadelphia and London 621 pages.

As in previous editions of his standard textbook, Dr. Noyes has devoted about three-fourths of the fourth edition to descriptions of clinical syndromes. The present edition has the added advantage that these are arranged according to the most recent revision of the American Psychiatric Association standard nomenclature for psychiatric disease.

Although there is extensive discussion of the psychoses and their treatment there is increasing space devoted to psychophysiological disorders, the psychoneuroses and personality disorders.

Dr. Noyes has interesting and profitable sections on the history of psychiatry and the various schools of psychological theory. There are also excellent summaries on psychiatric therapy and a new section on group psychotherapy. Dr. Noyes' book is especially valuable to the student and practitioner, because of its completeness in covering the many aspects of psychiatry and because of his eclectic approach.

Frank M. Gaines, M.D.

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(1) Holt, J. A. S., Jr.: *Dallas Med. J.* 42:497, 1956. (2) Gelvin, E. P.; McGavack, T. H., and Kenigsberg, S.: *Am. J. Digest. Dis.* 1:155, 1956. (3) Natenshan, A. L.: *Am. Pract. & Digest Treat.* 7:1456, 1956.

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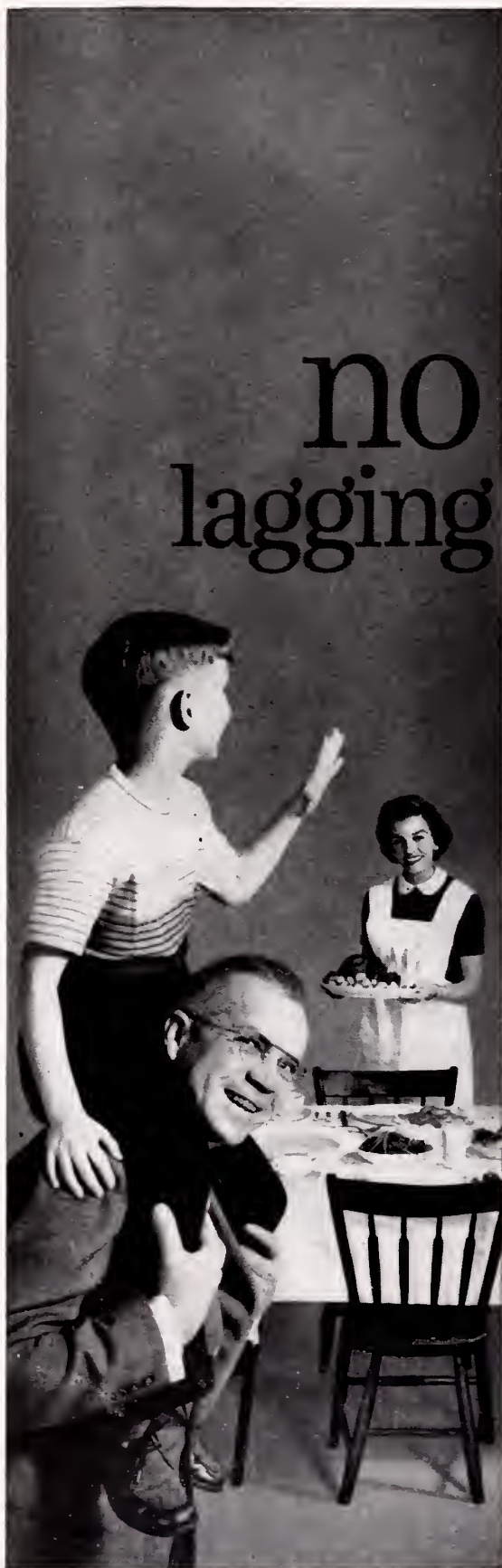
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1. Science News Letter, March 1954

2. Greenblatt, R. B.: Obstet. & Gyn. 2:530, 1953

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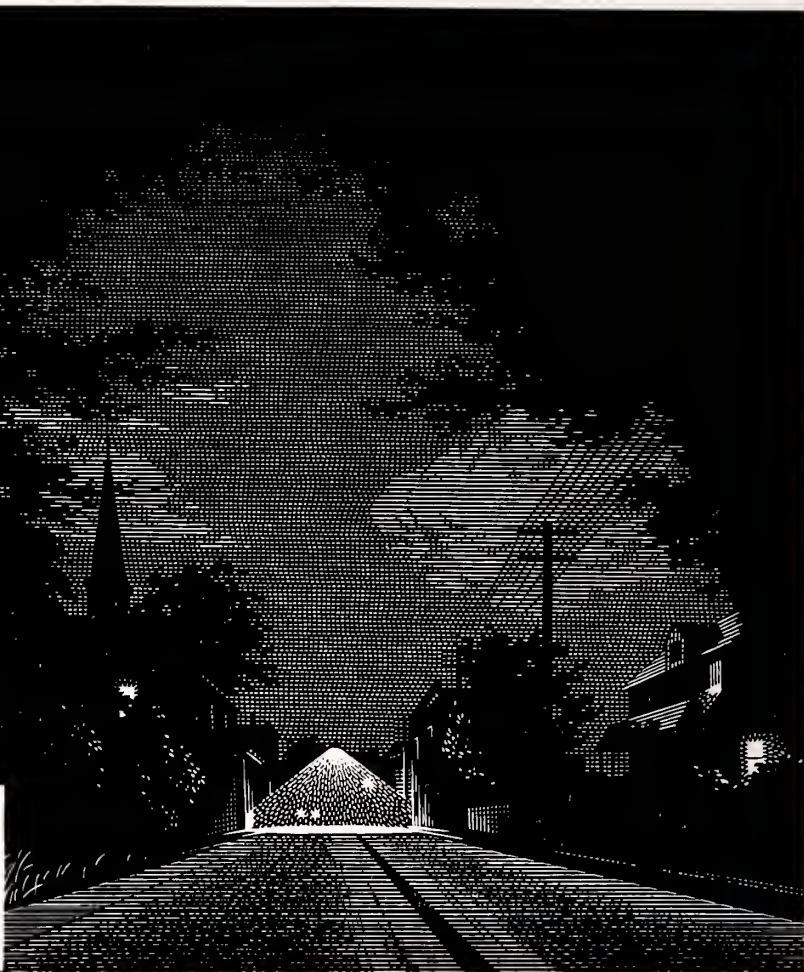
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The JOURNAL *of the* Kentucky State Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 55

MAY, 1957

NO. 5

CANCER OF THE GALL BLADDER*

EUGENE TODD, JR., M.D.

Lexington

MAXIMILLAN STOLL of Vienna in 1777,¹ published the first two authentic records of carcinoma of the gall bladder. His cases were proven by autopsy. One hundred and seventy-nine years have passed and we will have to admit that all but a very small fraction of the people who have cancer of the gall bladder reach the same end as the first two reported cases. In spite of all the recent advances in diagnosis and in surgical treatment of cancer, there has been no improvement in the cure rate of carcinoma of the gall bladder. This state of affairs is due to the fact that in most cases the malignancy has spread beyond possibility of recall by the time it comes to treatment. There are no early symptoms of cancer of the gall bladder. There may be recurrence of long-forgotten symptoms or exacerbations of smouldering trouble which has been present for some time, but these are late symptoms. The symptoms of malignancy of the gall bladder are indistinguishable from chronic liver or gall bladder disease or disease of the upper digestive tract of a less serious nature. The diagnosis is made more or less by exclusion of other conditions by physical examination, the use of x-ray examination and by the history that is obtained, but these findings only lead one to suspect the condition is present and are invariably inconclusive. The persistence of constant right upper quadrant pain is marked when cancer is present and the pain is usually intermittent in benign disease of the gall bladder. It remains for either surgery or autopsy to confirm the diagnosis. Occasional cures are obtained when gall bladders are removed for chronic or acute cholecystitis and a very small, early malignancy is removed. In

those cases in which cure is obtained the neoplasm is frequently so small as to be unrecognized until after the gall bladder has been removed and opened. The usual situation is one of finding an incurable condition already present. These tumors spread by direct extension early and spread into the regional lymph nodes also occurs early, but blood-born metastasis occurs late if at all. There is usually direct extension through the wall of the gall bladder into the liver substance and spread may occur by direct extension to the adjacent stomach, duodenum, pancreas, colon and extra hepatic bile ducts. This extension with resulting extreme distortion of the regional anatomy makes the attempt at removal by surgery an extremely hazardous procedure and one which almost invariably results in incomplete removal even when relatively early tumors are found. Recently nitrogen mustard has been used in the treatment and seems beneficial in some cases. Three tenths to six tenths mgms. of nitrogen mustard is injected into the hepatic artery when the tumor is found at operation and regression in size of the tumor may take place so the attempt at removal later will be feasible. It is still too soon to tell whether any cures will be obtained by this method.

Types and Etiology

Carcinomas of the gall bladder are divided by pathologists into several different types but by and large there are two main types. The great majority are adenocarcinoma. Most of these are of the scirrhus variety, but fairly well differentiated adenocarcinomas, mucoid adenocarcinoma and papillary forms occur. The other less frequent type is the squamous cell carcinoma. These are usually undifferentiated and apparently arise due to metaplasia of the lining epithelium. About 85 to 90 per cent

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of malignancies of the gall bladder fall into the adenocarcinoma type and 10 to 15 per cent represents the incidence of epidermoid carcinoma.

The factor or factors which bring on malignancies of the gall bladder have, in common with most other neoplasms, not been proved. Several workers have attempted to bring about cancer of the gall bladder in experimental animals. It has been suspected that the slight radio-activity in certain types of gallstones may be a factor. Petrov and Krotkina² reported successful production of carcinoma of the gall bladder in guinea pigs, an animal in which neither gallstones nor gall bladder malignancy is native. They used small glass rods some of which contained a small amount of radio-active material. These rods were placed in the gall bladders of the guinea pigs. The animals were killed after 14 to 30 months. Of 51 animals surviving from 14 to 30 months, five developed carcinoma of the gall bladder and four of these five had metastases. Four of the five developing carcinoma had only the plain glass tubes in place. All 51 animals developed epithelial hyperplasia. These results have not been duplicated in this country although attempts have been made to duplicate this work.³

There can be little doubt that there is a causal relationship between cholelithiasis and neoplasms of the gall bladder. Many workers have emphasized this fact. Glenn and Hayes⁴ after reviewing the statistics of 24 papers in which the incidence of calculi associated with carcinoma of the gall bladder varied from a low of 64 per cent to 100 per cent stated that: "In view of this data and the fact that the highest incidence of carcinoma of the gall bladder is found in the sixth and seventh decades of age, it seems reasonable to assume that up to five per cent of the patients with gallstones who reach the age of 69 may develop carcinoma of the gall bladder." This statement seems reasonable when one considers that approximately five per cent of all stone containing gall bladders examined at autopsy are found to also contain carcinoma. The appearance of the gallstones found in conjunction with gall bladder cancer and the appearance of that portion of the gall bladder wall not affected by the tumor bears out the suspicion that long continued biliary tract disease preceded the development of the tumor. Many of these patients have the condition known, or at least called, silent gall-

stones. In the series to be presented in this paper, the incidence of carcinoma in those patients over 60 who were operated on for cholecystic disease was 2.2 per cent and in those over 70 years of age it was 6.1 per cent. The true incidence of carcinoma of the gall bladder is hard to establish. Ulin, Leichtenstein, Garritano, and Fisher⁵ estimate the incidence in those people who have stones to be 2.9 per cent and they found malignancy of the gall bladder in seven patients out of 70 who were 60 years old or older who were operated on for gallstones. This is a 10 per cent incidence. Finney and Johnson⁶ stated in 1943 that eight to 10 per cent of all cancer occurring in the female is primary in the gall bladder and the male incidence was given as one to four per cent. They estimated that 14 per cent of women over 50 years of age have gallstones. Cancer of the gall bladder ranks sixth in frequency of occurrence among carcinomas of the digestive tract and accessory organs. The rate of occurrence found at operation and that found at autopsy would naturally be different as those people operated on by the surgeon will be on the average several years younger than those operated on by the pathologist. Arminski⁷ reports statistics from the Mayo Clinic which show that from 1902 to 1949, the incidence of carcinoma of the gall bladder found at operation had dropped from five per cent to 0.71 per cent. Sawyer and Minnis⁸ reported 27 cases of carcinoma of the gall bladder found in 1752 cholecystectomies, an incidence of 1.54 per cent. About 6,500 persons in the United States die each year of primary carcinoma of the gall bladder which is about four per cent of deaths caused by all malignancies. The rate of occurrence found at autopsy should fall gradually as more people get their stone-containing gall bladders removed before carcinoma develops.

Table I shows those patients seen at the Lexington Clinic from 1925 through 1955 who had carcinoma of the gall bladder. These 28 cases of primary carcinoma of the gall bladder were found at operation by the surgical staff of the Lexington Clinic. Four of these tumors were histologically of the epidermoid type. Twenty-two were adeno-carcinomas and in two cases no tissue was removed at the time of operation. The youngest patient was 42 years old, the oldest was 77. Ninety-three per cent were over fifty years of age. In 19 of the 28, stones were found in the gall bladder, in the

Lexington Clinic Figures

TABLE 1
Carcinoma of the Gall Bladder
1925 through 1955
28 Cases

Age	42-49	50-59	60-69	70-76
#	2	12	7	7
Sex	2 Female 0 Male	7 Female 5 Male	7 Female 0 Male	6 Female (1 colored) 1 Male
Stones	2—yes	7—yes 5—??	3—yes 4—??	7—yes
Type of Tumor	1 Epidermoid 1 Adenocarcinoma	2 Epidermoid 9 Adenocarcinoma 1 No biopsy	0 Epidermoid 6 Adenocarcinoma 1 No biopsy	1 Epidermoid 6 Adenocarcinoma

remaining cases no attempt was made to find out whether stones were present or not. This is a known incidence of stones in this series of 68

per cent. Twenty-two, or seventy-nine per cent, were females.

From July 1, 1949, until December 31, 1955, there have been nine patients found to have carcinoma of the gall bladder in a series of 663 consecutive operations for primary disease of the gall bladder. As these patients were treated by the present surgical staff of the Lexington Clinic they will be presented in some detail. There were three additional cases which had palliative operations for complications due to metastasis of gall bladder malignancy so that these nine cases actually occurred in a total series of 666 operations. No surgery was done on the biliary system in these three cases. The nine cases of carcinoma of the gall bladder in a series of 666 operations gives an incidence of 1.3 per cent carcinoma of the gall bladder. Table II shows that there were 615 cholecy-

TABLE II
July 1, 1949 to January, 1956
Total Operations for Cholecystic Disease Including
9 Carcinomas of the Gall Bladder—1.3% Incidence.

	Cholecystectomy	Cholecystostomy	Choledochostomy	Acute	Chronic	Female	Male	No. Operations on G. Bladder	Total
Number	615	48	111	148	515	540	126	3	666
Hospital Deaths	3-0.48 %	2-4.1 %	2-1.8 %	4-2.7 %	1-0.19 %				5-0.75 %

stectomies and 48 cholecystostomies in this series of operations. In these 663 cases common duct exploration was also done 111 times. There were 540 females and 126 males which gives an 81 per cent to 19 per cent preponderance for the female as compared to the male. One hundred and forty-eight of these cases were operated on for acute cholecystitis and 515 of them were sub-acute or chronic. In table III, the age incidence is shown. There were four patients from 16 to 19 years of age; 29 were from 20 to 29 years of age; 78 were from 30 to 39; 132 from 40 to 49; 193 from 50 to

59; 169 from 60 to 69 years of age and 58 cases were from 70 to 79 years of age. There was one patient who was 84 years old.

It is found that in the nine cases of cancer found in the 666 patients, three were epidermoid carcinomas and six were adenocarcinomas. In all nine cases, stones were found in the gall bladder. All nine cases were incurable by surgical means at the time of the operation and four of the cases were operated on for obstruction of some portion of the G I tract. In three, the obstruction was in the duodenum and in the other case the mid-ileum

TABLE III
Operations by Age Groups

AGE	16-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	Total
NUMBER	4 0.6 %	29 6.3 %	78 11.7 %	132 19.9 %	193 29.1 %	169 25.6 %	58 8.5 %	1 0.1 %	663

TABLE IV
Carcinoma of the Gall Bladder July, 1949 to January, 1956

Age	Sex	Stones	Type	Operative Procedure	Previous History of Gall Bladder Disease
42	F	Yes	Adeno-Carcinoma	Cholecystectomy incurable	Colic at intervals for six months
45	F	Yes	Epidermoid	Cholecystectomy incurable	Acute cholecystitis; no previous symptoms
50	F	Yes	Epidermoid	Cholecystostomy incurable	Colic on and off for three years with positive x-ray 2 years before.
55	F	Yes	Adeno-Carcinoma	Cholecystostomy died-Peritonitis	Acute cholecystitis; history compatible with stone for 8 to 10 years.
64	F	Yes	Adeno-Carcinoma	Gastro-Jejunostomy for duodenal obstruction—incurable.	No previous history of trouble.
70	F	Yes	Adeno-Carcinoma	Sub-Total gastrectomy; cholecystectomy; segmental resection of transverse colon; partial cholecystectomy-duodenal obstruction. Died.	Symptoms of trouble for one month.
72	M	Yes	Adeno-Carcinoma	Cholecystectomy incurable	Acute colic two months.
76	C/F	Yes	Adeno-Carcinoma	Resection portion of ileum-obstruction from metastasis	No previous history of stones.
77	F	Yes	Epidermoid	Gastro-Jejunostomy obstruction of duodenum by ca.	History of colic two years; positive x-ray one year ago.

was obstructed. The nine cases with carcinoma are summarized in Table IV.

Case Summaries

Case #165-572. The youngest patient was a white female age 42. She came to surgery because of the symptoms and signs of acute cholecystitis. At operation the liver was infiltrated by a carcinoma of the gall bladder. This was an adenocarcinoma, grade III. Stones were present. She had had symptoms of gallstones for only six months. Cholecystectomy was done but cure was not obtained due to the extensive liver infiltration.

Case #147-656, was a 45-year-old white female who had had symptoms of gall bladder disease for only two months without any history of colicky pain. She had an infiltrative epidermoid carcinoma and the gall bladder contained multiple stones.

Case #46-792, a 50-year-old white female with a history of gall bladder disease for three years. Recent cholecystogram had revealed stones in the gall bladder. She also was found to have an epidermoid carcinoma grade III.

Cholecystostomy was done as she was obviously incurable.

Case four, #150-586 was a 55-year-old white female with a history compatible with gall bladder disease for at least 10 years. She had acute cholecystitis with cholelithiasis and an adenocarcinoma grade II. She died on the fifth post-operative day from peritonitis.

The fifth case, #145-887, was a 64-year-old white female who came to the hospital with duodenal obstruction which had been present for approximately four weeks. This obstruction was found to be due to metastatic carcinoma with the primary lesion in the gall bladder. A gastro-jejunosomy was done. She had a grade II adenocarcinoma and multiple stones were present in the gall bladder. She had no past history of gall bladder colic or disease.

The sixth case, #134-918, was a 70-year-old white female who had symptoms of trouble for only one month and no history of cholecystic disease. She had an adenocarcinoma grade II with wide-spread metastasis and died in the hospital on the first post-operative day

apparently from a pulmonary embolus. She had multiple stones in the gall bladder. Radical surgery was done on this patient in an attempt to cure her. A sub-total gastrectomy, cholecystectomy, segmental resection of the transverse colon, partial choledectomy with the indicated anastomoses were done.

The seventh case, #115-104, was a 72-year-old white male, who had been having some trouble compatible with gall bladder disease for about two years. He had been having episodes of severe colic for two months. He had a grade II adenocarcinoma with wide-spread metastasis and multiple stones were found in the gall bladder.

The eighth case, #150-230, a 76-year-old colored female, who had no previous history of gall bladder disease but had been chronically ill for about eight months. She presented herself with a small bowel obstruction due to metastatic tumor. The mid-ileum was obstructed and the primary lesion was in the gall bladder, an adeno-carcinoma, grade II. Stones were present in the gall bladder.

The ninth case, #153-764, a 77-year-old white female who came to the hospital with duodenal obstruction. She had a history compatible with gallstones for about two years, and a positive cholecystogram had been obtained one year before admission. She had an adenocarcinoma grade III with extensive local infiltration and wide-spread abdominal metastasis. Stones were found in the gall bladder. A gastro-jejunostomy was done.

It is extremely interesting to note that four of these nine cases had no previous history of symptoms which could be construed as due to gall bladder disease. Two other cases had only had symptoms for less than two months. Therefore these cases fall into that group known to the medical world as "silent gallstones." Three of these patients died during their hospital stay. One died from peritonitis on the fifth post-operative day, one died from pulmonary embolus on the fifth post-operative day and the third died from a pulmonary embolus on the first post-operative day.

In the 663 consecutive cases which were operated on in the last six and one-half years for primary disease of the gall bladder, there were five deaths. Analysis of these five post-operation hospital deaths reveals that two of them occurred in patients who had incurable cancer of the gall bladder.

Case #153-647, was a 53-year-old white female who had had symptoms compatible with gall bladder colic for the last 25 years. For the last 10 years, she had had practically no symptoms until three weeks before she was seen. Pain in the right sub-costal region and right scapular region had been present constantly for the last two weeks and nausea but no vomiting had been present. Her temperature was 99.4°. Her blood count was normal. Icteric index was 28 units. At operation the patient had marked inflammatory adhesions, so marked that the gall bladder was found only with difficulty. A cholecystostomy was done. There was an empyema of the gall bladder which had ruptured into the liver and was pointing on the superior-anterior surface of the right lobe of the liver. The stones were removed from the gall bladder. No exploration of the common duct was deemed possible at that time. This patient had a stormy course with deepening jaundice, chills and fever and gradual down-hill course. She died on the 29th post-operative day. No autopsy was obtained.

Case #87-237 was admitted to the hospital on 6-28-52. He was a 74-year-old white male. He had been acutely ill for 48 hours with epigastric pain, nausea and vomiting. Jaundice had been noticed one day before admission. His red blood count was normal. His white blood count was 12,000 with 94 per cent polymorphonuclear forms. The icterus index was 26 units. He was rigid in the upper abdomen and the temperature was 102°. He appeared acutely ill. His past history was compatible with gallstones for 10 to 15 years before admission. He had had no trouble for several years. He was treated eight hours with supportive measures which resulted in little, if any, improvement. His abdomen was still rigid in the upper half and his pain was difficult to control with the usual doses of narcotics. Operation was done about nine hours after admission, recognizing that he was a very poor risk. At operation, empyema of the gall bladder was found but there had been no perforation. Stones were present in the gall bladder but none were in the common duct. His gall bladder was removed and a T-tube placed in the common duct. He made very poor progress with deepening jaundice. He put out

only 100 to 200 cc of bile per T-tube daily. His stools remained acholic. On the tenth post-operative day, he had two pulmonary emboli with only slight evidence of any deep venous clotting in the lower extremities. Bilateral superficial femoral vein ligation was done as it was thought that anti-coagulant therapy would be dangerous in view of his extreme liver damage. He had no more pulmonary emboli but he gradually became weaker and died, deeply jaundiced, 20 days post-operation.

Case #95-133 was an 84-year-old white female who presented herself with acute cholecystitis and who was known to have gallstones for at least 20 years. At operation many stones were found and a small abscess also found near the inferior border of the neck of the gall bladder. Cholecystostomy was done with uneventful recovery. She had a recurrence of colic, chills, and fever 16 months later and on this occasion cholecystectomy was done and the common duct was explored. One stone was found in the gall bladder but none were found in the common duct. The patient stood the procedure well but died suddenly on the first postoperative day from what was apparently a pulmonary embolus but could have been a coronary occlusion. Permission for autopsy was not obtained. This unfortunate lady had survived an adenocarcinoma of the right breast for five years and an adenocarcinoma of the fundus uteri for 10 years. Both of these lesions were treated by surgical removal.

Case #150-586, was a 55-year-old white female who came in with acute cholecystitis. She had a history of gallstone colic for eight to 10 years. At operation an acute cholecystitis was found with many stones present and an adenocarcinoma of the gall bladder which had extensively infiltrated the liver. This patient died on the fifth postoperative day from an undetermined cause but it was thought she probably had developed peritonitis.

Case #134-918, a 70-year-old white female has previously been discussed. She had had

no previous history of gall bladder trouble but had been having pain in the epigastrium and right upper quadrant of the abdomen for one month. She had begun to vomit two days before admission to the hospital. A mass was palpable in the right side of the epigastrium and the patient had complete pyloric obstruction. At operation, five days after admission, a carcinoma arising in the gall bladder was found and gallstones were present. The tumor had infiltrated the adjacent liver edge and was causing obstruction of the duodenum in its first portion. The transverse colon just distal to the hepatic flexure was adherent to the gall bladder and the wall was infiltrated. There was no evidence of distant metastasis. About one-fourth of the right lobe of the liver, the gall bladder and about one-half inch of the proximal common duct was excised as well as the distal one-third of the stomach and the first portion of the duodenum. The involved portion of the transverse colon was also removed. The various anastomoses were done and the patient did well for two days and died suddenly without warning. No post-mortem was obtained but her death was thought to be due to a pulmonary embolus. The tumor was an adenocarcinoma arising in the gall bladder.

These five deaths which occurred in a series of 663 operations might have been prevented had the gall bladder been removed at an earlier date. All except one had had symptoms for years before the operation was done. The "silent stone" phase was prominent in these four patients.

Included in this series of cases were 657 consecutive cases which were operated on for non-malignant disease of the gall bladder. In Table V, it can be seen that there were 612 cases in which cholecystectomy was done and 45 cases in which cholecystostomy was done. One hundred and eleven times the common duct was explored in addition to one of the other procedures. There were three hospital deaths in the postoperative period with the hospital death

TABLE V
Operations for Benign Cholecystic Disease

	Cholecystectomy	Cholecystostomy	Choledochostomy	Acute	Chronic	Total
Number	612	45	111	147	510	657
Hospital Deaths	2-0.32%	1-2.2%	2-1.8%	3-2.04%	0-0.0%	0.45%

rate of 0.45 per cent. There were two deaths, 0.32 per cent in which cholecystectomy was done. There was one death, 2.2 per cent in which cholecystostomy was done. There were two deaths, 1.8 per cent, in the 111 cases in which choledochostomy was added to one of the other procedures. One hundred and forty-seven of these patients had acute cholecystitis with its various complications and all three of the deaths occurred in this division. One of the patients who died was 53-years-old, one was 74-years-old and one was 84-years-old. This is a mortality rate of 2.04 per cent in acute cholecystitis. There were 510 cases of chronic cholecystitis with cholelithiasis and there were no deaths in this division. Four hundred and twenty-one or 64 per cent of these cases were over 50 years of age. In the previously reported cases of carcinoma, 93 per cent were over 50.

Discussion

During this six and one-half year period, 219 other patients were found to have gallstones either by cholecystogram or at the time of operation for some unrelated disease. These patients either refused operation or there were unrelated physical factors present which would make an elective procedure hazardous and thus operation was not advised. However, by using the statistics found here, we can expect about thirteen (6.1 per cent over 70 years) of these people will develop carcinoma of the gall bladder if they live long enough. It can be reasonably expected that about 22 per cent or 58 of the 219 will develop complicated gall bladder disease and that as a result of their complication, two of them will die following operation. Therefore one can expect that 15 of these patients may die because their gallstones were not removed before complication occurred. Jaguttis⁸ of the Konigsborg Medical Klinik followed 114 cases of gall bladder stones from 10 to 25 years. Thirteen died of cholecystic disease; 25 underwent surgery for serious complications, of whom four died. Five developed carcinoma of the gall bladder. Clagett⁹ reported a follow-up of 150 patients seen at the Mayo Clinic who refused operation after gallstones were demonstrated. Within two years, 27 per cent had been operated on for serious complications such as jaundice, pancreatitis, and perforated gall bladder.

Perhaps one cannot say that gallstones cause

cancer of the gall bladder but the occurrence of the two together is too great to be only a coincidence. One may not be justified in advising cholecystectomy when "silent stones" are present just to prevent the occurrence of cancer of the gall bladder. One certainly is justified in advising cholecystectomy when the entire gamut of complications from gallstones is considered. The essayist does not believe there is such a thing as a "silent gallstone." Even though symptoms and signs of damage to the patient may be few or absent at any given time, nevertheless the fuse is lit and is smouldering. It is difficult to visualize how anyone can advise a patient to leave their gallstones alone because they are "silent." The mortality rate of operation for uncomplicated cholecystitis with cholelithiasis has been reduced to a level where one can advise removal of the gall bladder when the life expectancy is good and the general condition of the patient is acceptable. As has been shown in this series there were no deaths following cholecystectomy for chronic benign disease of the gall bladder. The "silent stone" viewpoint is especially irritating when one is operating on an elderly, fat, female, with jaundice, acutely inflamed, gangrenous gall bladder with the consequent distorted anatomy and with vascular oozing all over the field and the common bile duct full of stones. These patients have a stormy, prolonged post-operative hospital stay with the great possibility of having permanent liver damage and even of having to be operated on again for a retained common duct stone. The morbidity and mortality rate in the above described patient would be almost nil had she been operated on 15 to 20 years earlier at the time she first had symptoms of gallstones and before the "silent stone" period occurred. In 1938, the late Dr. Frank Lahey stated that¹⁰ "one cannot help being impressed with the fact that the non-removal of all gall bladders with stones results in much morbidity and in many fatalities which would not have occurred had the operation been undertaken earlier." Death from carcinoma of the gall bladder is only one of these adverse occurrences. Perhaps the case was best stated by Walters¹¹ when he asserted that "many physicians and some surgeons still believe that if gallstones are producing no symptoms then there is no need to remove the gall bladder. There is no doubt that great harm can be done to the great majority of people so treated. At

sometime most of these people will have symptoms and some will get into serious difficulty. These complications make removal much more hazardous and even after removal, the infection they have undergone may leave them with symptoms which they would not have had if their diseased gall bladders had been removed earlier." Walters estimated that acute cholecystitis or choledocholithiasis makes the risk of operation three and one-half times greater than if surgery had been done before these complications occurred. It may be added that these are the minimal complications which occur. A liver cripple is an extremely unhappy as well as unhealthy individual and this type of cripple can be prevented by removing the "silent gallstones."

Summary

1. Twenty-eight previously unreported cases of carcinoma of the gall bladder have been presented.
2. The incidence of carcinoma in a series of 666 cases of cholecyctic disease has been given.
3. The so-called "silent gallstone" has been discussed.

4. The mortality rate from cholecystectomy and cholecystostomy in 657 consecutive operations for benign disease of the gall bladder has been shown and discussed.
5. A plea has been made for more serious consideration for the future long and healthful life of the patient who has gallstones.

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THROMBOTIC THROMBOCYTOPENIC PURPURA*

ELLIS A. FULLER, JR., M.D. and WILL W. WARD, JR., M.D.

Ann Arbor, Michigan

A RATHER unique group of symptoms consisting of thrombocytopenia with purpura, hemolytic anemia, varying central nervous system manifestations, and fever as a clinical entity has been described with increasing frequency. This tetrad of signs and symptoms is now generally referred to as thrombotic thrombocytopenic purpura, an established and rhythmical but not completely descriptive name. The syndrome was originally described in a sixteen-year-old colored girl by Moschowitz¹ in 1925, and since that time there have appeared reports on slightly over sixty cases in American and European literature. As will be pointed out later, there is increasing evidence that the disease may be more closely allied with the various connective tissue disorders than with the usual thrombocytopenic states. The diagnosis is primarily a clinical one, necessitating only the physician's awareness of the existence of such a syndrome. The presence of purpura, jaundice, and constitutional symptoms associated with bizarre and transitory neurologic signs should call to mind the possibility of this disease. It is a disease which is not selective in its choice of age and sex, having been reported almost as frequently in adult males as females, and at all ages, although it has been very rare in young children.² It is our purpose to present a case demonstrating the characteristic findings and to briefly discuss the pathogenesis, differential diagnosis, treatment, and prognosis of the disease. We wish to express our appreciation to Dr. Harry Lamb of Sturgis, Michigan, who made the initial diagnosis and referral of this case.

Case Report

A thirty-five-year-old white male was admitted to the University of Michigan Hospital on June 22, 1956 having been in apparently good health until five weeks prior to admission. At that time he noted some bruising of the extremities, and three weeks before admission he experienced a sudden paralysis of the left side with aphasia lasting about forty-five minutes. About this time it was also noted by the family that the patient was jaundiced. Subse-

quently he had several transitory episodes of incoordination and inability to use the left hand, all associated with temporary aphasia. A rather steady, generalized headache had been present during this period. Gross hematuria and epistaxis had occurred, and it had been necessary to transfuse the patient with five pints of blood elsewhere during the two weeks prior to admission. Sternal marrow examined on June 16, 1956 had been interpreted as normal, while the peripheral blood was reported as showing only an anemia and a decrease in the number of platelets. The patient had been confused and somewhat disoriented but without evidence of focal neurologic lesions during the four days preceding admission. There had been no past history of jaundice or bleeding episodes. A urinary tract infection had been treated with an unknown antibiotic two months prior to admission. The patient worked as a spray painter, and, as far as his wife knew, the only solvent handled was xylol. Treatment prior to admission consisted of transfusions, vitamin K, and vitamin C. Exophthalmos had been present since 1947 when a toxic goiter was surgically removed. The past history and review of systems was otherwise non-contributory.

The physical examination on admission revealed a well developed and well nourished thirty-five-year-old male in no apparent distress. He was somewhat confused and poorly oriented but answered questions relatively coherently. The blood pressure was 150/90, pulse 88, respirations 20, and temperature 101° F. A few petechiae were scattered over the shins and forearms, while the sclerae were icteric. Flame shaped hemorrhages were noted in the left fundus. The thyroid was not palpable. The lungs were clear while the heart was of normal size with a regular rhythm and soft apical systolic murmur. There was no tenderness, and no masses of organs could be felt within the abdomen. Rectal examination was normal. Neurological examination demonstrated only sensory changes without focal motor abnormalities.

Urinalysis was within normal limits. Blood count revealed a hemoglobin of 10.4 grams per cent; hematocrit 30 per cent; erythrocyte count

*From the Department of Internal Medicine, University of Michigan and University Hospital, Ann Arbor, Michigan.

3.4 million per cu. mm.; sedimentation rate 22 mm. per hr. corrected (Wintrobe). The white blood cell count was 8,450 consisting of 70% neutrophils, 2% large lymphocytes, 12% small lymphocytes, and 16% eosinophils. The peripheral blood film revealed an almost complete

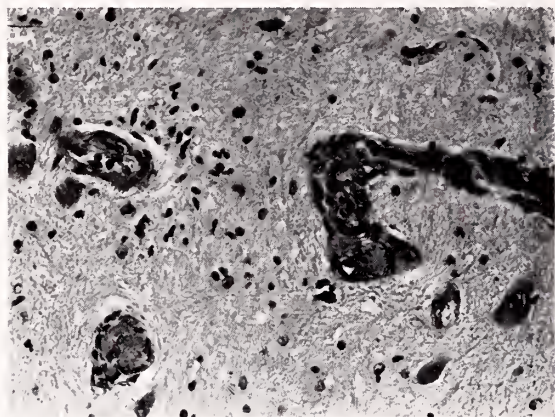


FIGURE 1

A section of brain showing rather typical hyaline obstructing material in the smaller vessels.

absence of platelets, anisocytosis, poikilocytosis, and some spherocytes. There were 10% reticulocytes. Total serum bilirubin was 3.0 milligrams per cent with a direct acting portion of 0.3 milligrams per cent in one minute. Other laboratory values revealed gamma globulin 1.2 units, thymol turbidity 1.1 units, total serum protein 8.6 grams per cent with 6.3 grams albumin and 2.3 grams per cent globulin for an A/G ratio of 2.7, negative Kahn test, prothrombin concentration 74% of normal, blood non-protein nitrogen 38 milligrams per cent, fasting blood sugar 91 milligrams per cent, cephalin flocculation negative at 24 and 48 hours, normal serum electrolytes, negative heterophile agglutination test, and 24 hour urinary urobilinogen of 7.2 Ehrlich units. The direct and indirect Coomb's tests were negative. The Rumpel-Leede test was strongly positive, Lee White clotting time 12 minutes, and bleeding time greater than 30 minutes.

Lumbar puncture revealed clear colorless fluid with a normal cell count and total protein of 70 milligrams per cent. The opening pressure was 190 mm. and the closing pressure 90 mm. of water. Routine chest and skull films revealed no abnormalities. Sternal marrow aspiration on admission revealed a cellular specimen showing active erythropoiesis and granulopoiesis. The erythropoiesis was normoblastic

with many early and intermediate normoblasts. Granulopoiesis was without maturation defect and a slight increase in eosinophils was noted. The megakaryocytes were also increased and showed no platelet budding. There was no evidence of either malignant or leukemic infiltration.

Immediately after obtaining the bone marrow the patient was started on 300 mgm. of cortisone daily, but progressive signs of neurological involvement were evident. Fever ranged from 100°F to 105°F shortly before death. The tourniquet test had become negative on 6/27/56. During hospitalization 1000 cc. of fresh blood obtained in silicone bottles was administered without apparent effect or benefit. There was a gradual increase in the number of retinal hemorrhages, and the patient was quadriplegic the day before his demise. He expired quietly in deepening coma on June 28, 1956, six weeks after the onset of clinical symptoms and six days after his hospital admission.

Gross pathological examination confirmed the obvious icterus and revealed widespread petechiae in the brain, heart, kidneys, skin, bladder, and gastrointestinal tract. The brain showed no particular surface abnormalities, but innumerable petechiae were present over the cut surfaces. On microscopic examination many cerebral arterioles and capillaries were seen to be partially occluded by eosinophilic hyaline masses adherent to and apparently originating

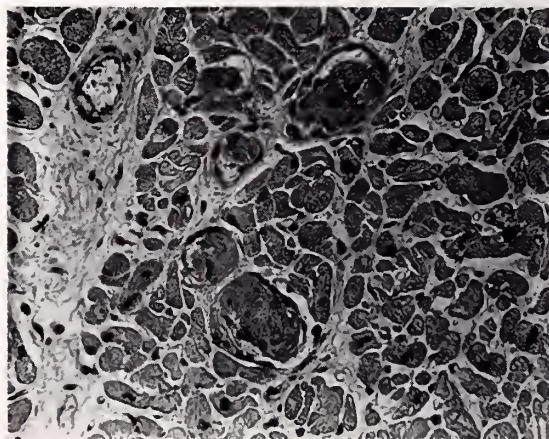


FIGURE 2

Occluding masses are seen protruding into the vessel lumens beneath the vascular endothelium of small vessels of the heart.

from the vessel wall. The process was noted in degrees varying from almost complete occlusion to hyaline change involving the vessel wall without an intraluminal component. In some

areas the hyaline obstructing material was accompanied by endothelial proliferation, but nowhere was there an associated inflammatory response. The surface of the heart, which weighed 340 grams, was riddled with subepicardial

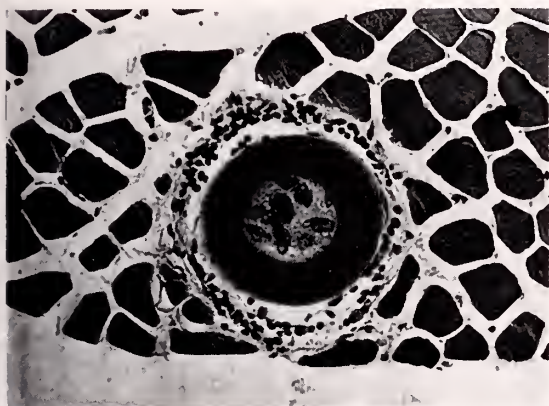


FIGURE 3

A cross section of one of the larva of *Trichinella spiralis* with surrounding inflammatory cells is shown in psoas muscle.

petechiae over both atria and ventricles. Occluding masses of "bimorphic" material consisting in part of eosinophilic hyaline material associated with a mural process and in part of a cap of finely granular material, presumably platelets, were again noted in the arterioles and capillaries. The capsules were easily stripped from the kidneys, which weighed 190 grams each. Similar lesions were found in glomerular and extraglomerular vessels. Occasional glomeruli were almost completely obliterated by hyaline material, while about ten per cent of them were affected by a peculiar proliferative process apparently involving endothelial cells and resulting in replacement of normal glomerular structure by balls of closely packed cells. There was no inflammatory process accompanying these proliferations. Typical vascular changes were also noted in parathyroids, liver, adrenals, and submucosal vessels of the gastrointestinal tract. Encysted larvae of *Trichinella spiralis* were found in the diaphragm, while cross sections of two similar parasites were seen in psoas muscle, one of which was surrounded by a ring of chronic inflammatory cells.

Discussion of Case

This case presents the four classical features which are universally associated in the syn-

drome. The relapsing neurological picture of multiple and diffuse lesions as evidenced here has been adequately described as an integral part of this disease.³ The anemia, elevated indirect acting serum bilirubin, reticulocytosis, and increased urinary urobilinogen are adequate evidence for the hemolytic process. The negative Coomb's test is the expected finding, although antibodies have been demonstrated in three cases.⁴ The only universal constitutional sign has been fever as demonstrated here; however, as in all thrombocytopenic states, hemorrhagic phenomena from all organ systems may be seen. Arthralgias, hepato-splenomegaly, lymphadenopathy, anorexia, nausea, vomiting, and terminal renal insufficiency with moderate azotemia are relatively common concomitants.⁵ This is a generalized and disseminated disease so that signs and symptoms referable to all organ systems have been described. The ultimate progression and death in this patient, secondary to the widespread central nervous system involvement, despite corticosteroid therapy and transfusions of fresh blood is typical of the usual therapeutic results.⁶ To our knowledge the concurrent finding of apparently active trichinosis has not been previously reported in thrombotic thrombocytopenic purpura. Speculation on its relationship to the pathogenesis is tempting; however, in all probability it is only a coincidental finding and explains only the eosinophilia.

Differential Diagnosis

In a patient with purpura, it is of major importance to determine initially whether thrombocytopenia or a primary vascular lesion is the basic defect. This is done by performing the tourniquet test, the bleeding time, examination of the blood film, and accurate platelet counts. If the platelets are decreased, determination of the status of the megakaryocytes by bone marrow examination is the next logical differential step. Thrombotic thrombocytopenic purpura must be differentiated from other states in which absent or decreased numbers of platelets are found in the peripheral blood in spite of the presence of normal numbers of megakaryocytes in the marrow. The final proof of the diagnosis during life rests on finding the characteristic hyaline changes in the small blood vessels by biopsy.⁷

The bone marrow pictures of thrombotic thrombocytopenic purpura and acute or chronic idiopathic thrombocytopenic purpura may be identical, showing normal or increased numbers of megakaryocytes which do not have platelet budding. The syndromes can be confused if the significance of the icterus and neurologic changes is not comprehended. Acquired hemolytic anemia and thrombocytopenia may in fact be combined in the "Fisher-Evans" syndrome, but here the Coomb's antiglobulin test is usually positive and the hyaline change in the arterioles and capillaries which is the hallmark of thrombotic thrombocytopenic purpura is absent.

Any of the hypersplenic states whether secondary to lymphoma, chronic infection, portal hypertension, lipoidoses, collagen disease, or nonspecific hyperplasia may produce thrombocytopenia. These states are most often associated with decreased numbers of the other formed elements of the blood and frequently produce pancytopenia. Here, of course, recognition of the underlying disorder is of primary importance, and involvement of other organ systems may produce signs and symptoms leading to the correct etiologic diagnosis.

The possibility of drug sensitivity should be kept in mind in all patients with thrombocytopenia even if normal numbers of megakaryocytes are present. It has been recently demonstrated that agents such as Sedormid®, Mebaral®, quinine, quinidine, and others may produce an immunologic thrombocytopenia in sensitive individuals. An antigenic drug-platelet complex is formed, and the antibodies which result are capable of producing severe thrombocytopenia on subsequent exposure to the drug. The antibodies produced in this interesting phenomenon can be demonstrated in vitro by proper techniques.

Other interesting causes of thrombocytopenia include the so called "massive transfusion syndrome" in which a large volume of platelet poor stored blood is given as replacement in massive hemorrhage, and thrombocytopenia associated with large hemangiomas which disappear after regression of the tumor following x-ray or other therapy. Varied forms of congenital or neonatal purpura have been described, but these should seldom be of importance in the differential diagnosis of thrombotic thrombocytopenia. Further details regarding the findings in thrombocytopenic states may be

found in Stefanini and Dameshek's recent text, *The Hemorrhagic Disorders*.⁸

Pathogenesis

Attempts at elucidating the fundamental pathogenesis of this disorder have not been conclusive. When Baehr, Klemperer, and Schiffrin demonstrated the thrombi to be platelets, they postulated that the thrombocytopenia was due to the utilization of platelets to form these thrombi.⁹ The demonstration of an accumulation of hyaline material in the subintima of the capillaries and arterioles, which appears to precede the formation of the thrombi,¹⁰ has led us away from the idea of simple platelet thrombosis toward the inclusion of this entity among the connective tissue disorders. The lesions are usually found in the terminal arterioles and capillaries, but Ellison¹¹ has reported a case in which the venules were the principal vessels involved. Histochemical and histological studies would indicate the close relationship of this material in the vessel wall to the fibrinoid substance found in the so called "collagen diseases."¹² Disseminated lupus erythematosus is the connective tissue disorder which most closely resembles thrombotic thrombocytopenic purpura, but the L E cell phenomenon has been reported in only one case, in which the coexistence of the two diseases was pathologically demonstrated.¹³ The disorder lacks the characteristic perivascular infiltration of lupus and other connective tissue diseases. Autoimmune mechanisms have been postulated because of the associated hemolytic anemia and Singer's reports of increased fragility of the erythrocytes, but definite platelet antibodies have not been demonstrated in this disorder. However, identification of specific platelet antibodies has become a useful procedure in the diagnosis and management of other thrombocytopenic states,¹⁴ and further refinement of this technique may prove useful in bringing to light immunologic factors in the etiology of this condition. The frequent occurrence of a preceding infection, usually respiratory, might suggest a hypersensitivity reaction, but in this case the eosinophilia would seem readily explained by the concurrent parasitic infestation. Increased awareness leading to more frequent antemortem diagnosis should permit more enlightened investigation of the pathologic physiology involved.

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INCIDENCE OF LESIONS IN 6000 CONSECUTIVE PROCTOSCOPIC EXAMINATIONS*

MARVIN A. LUCAS, M.D., and EDWARD C. BOWLING, M.D.**

SIX THOUSAND consecutive proctoscopic examinations were done at this hospital on new patients from November 11, 1946 to September 13, 1954. The patients were referred to the proctology clinic because of complaints referable to the anus, rectum or colon, or as a part of a complete medical work-up. Follow-up examinations and repeat examinations are excluded in this study.

These patients in general were younger than patients with similar complaints seen in private proctological practice or in Cancer Detection Centers. Korean and World War II veterans ranging in age from 20-45 years, account for 55-60 per cent of the group, and World War I veterans for 40-45 per cent with ages ranging

from 45-70. The remaining 2-5 per cent are veterans of the Spanish American War.

The incidence of any lesion is important, especially if it involves a particular organ or if the disease is a definite entity. A large proportion of the adult population is known to have rectal disease, which, in the majority of cases, is asymptomatic or "silent" until late in its evolution.

The patients were examined by careful inspection of the perineal area followed by a complete digital, anoscopic and sigmoidoscopic examinations, and utilizing barium enema with air contrast when necessary. Each of these procedures may be responsible for the detection of many lesions, this indicating the importance of a complete and systematic examination. No other region of the body so readily lends itself to so complete an examination so simply.

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Treatment

Therapy including ACTH, steroids, transfusions of fresh blood, anticoagulants, and splenectomy has been uniformly unrewarding, with death ensuing usually in a matter of a few weeks or months. Splenectomy has been reported of value in securing a three year remission in one case,¹⁵ and probably is warranted in the more slowly progressive cases. The usefulness of the corticosteroids in the treatment of various immunohematologic diseases and the connective tissue diseases merits their further trial in thrombotic thrombocytopenic purpura. In this case the reversal of the tourniquet test is suggestive evidence of the strengthening of capillary tone without apparent effect on the basic pathologic process.

Summary and Conclusions

1. An illustrative case of thrombotic thrombocytopenic purpura is presented with the pathologic findings.

2. The differential diagnosis of the thrombocytopenic states and observations on the pathogenesis of thrombotic thrombocytopenic

purpura are discussed.

3. The prognosis remains uniformly fatal due to lack of satisfactory treatment.

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TABLE I
INCIDENCE OF DISEASE IN 6000 CONSECUTIVE EXAMINATIONS

	1st 2,000 cases		2nd 2,000 cases		3rd 2,000 cases		Total 6000 cases	
	No.	%	No.	%	No.	%	No.	%
No disease found	504	23	440	22	458	22.8	1402	23.8
Unsatisfactory examination	13		13		8		34	
Refused examination	3		2		1		6	
Patients with one or more rectal lesions	1480	74	1545	77.2	1533	76.8	4558	76.0

One thousand four hundred two or 23.2 per cent of the 6000 patients were free of detectable disease. The examination was unsatisfactory in 34, due either to poor cooperation or to some technical difficulty. One or more lesions were found in 4,558 patients or 76 per cent. This demonstrates the importance of performing a thorough proctologic examination on all patients with specific gastrointestinal complaints. Some important clinical features of these lesions will be discussed.

Hemorrhoids

Hemorrhoids, either internal or combined internal and external were the most frequent

finding in our patients, being present in 2,300 patients. A large proportion of our adult population is known to have hemorrhoids. Many of these are small or asymptomatic internal hemorrhoids.

A complex classification of this very common disease is unnecessary. Surgery is recommended in only those cases with symptoms.

The incidence in the first 2000 cases was 35.8 per cent rising to 42.6 per cent in the last 2,000 of this series. It will be very interesting to follow this group of individuals to determine whether or not the incidence increases with age.

TABLE II
INCIDENCE IN 6000 CONSECUTIVE EXAMINATIONS

	1st 2,000 cases		2nd 2,000 cases		3rd 2,000 cases		Total 6000 cases	
	No.	%	No.	%	No.	%	No.	%
Internal	329		454		320		1103	
Mixed	297		215		434		946	
Thrombosed Ext.	70		54		81		205	
Thrombosed Int.	14		5		8		27	
Actively bleeding	9		2		8		19	
TOTAL	719	35.8	730	36.4	851	42.6	2300	38.33

Pyogenic Infections

Pyogenic infections were present in 22 per cent of the group. Fissure in ano was the most common lesion, being present in 494 patients. Fistula in ano and rectal abscess accounted for an additional 441 cases.

These diseases are present either alone or, more often, they are associated with hemorrhoids. Pain is usually the most prominent symptom. In our experience infection accounts for most of the acute anorectal diseases.

TABLE III
INCIDENCE OF ANORECTAL PYOGENIC INFECTIONS IN 6000 CONSECUTIVE EXAMINATIONS

	1st 2,000 cases		2nd 2,000 cases		3rd 2,000 cases		Total 6000 cases	
	No.	%	No.	%	No.	%	No.	%
Fissure in ano	204		131		157		492	
Fistula in ano	116		89		101		306	
Rectal Abscess	37		51		47		135	
Hypertrophied anal papilla	91		68		38		197	
Cryptitis	40		26		20		86	
Rectourethral fistula	—		1		2		3	
Tuberculous enteritis	1		2		—		3	
Tuberculous fistula	1		1		1		3	
Vesicorectal fistula	1		2		—		3	
TOTAL	491	24.6	371	18.5	366	18.3	1228	22

TABLE IV
INCIDENCE OF ANAL STRICTURE IN
6000 CONSECUTIVE EXAMINATIONS

	1st 2,000 cases	2nd 2,000 cases	3rd 2,000 cases	Total 6000 cases
Contracted anus (non-specific)	15	5	11	31
Postoperative	1	2	1	4
Amoebic	2			2
Post radiation	3			3
Lymphopathia venereum		1	1	2
TOTAL	21	8	13	42

Anal Stricture

The incidence of anal stricture in our series of patients is quite low, accounting for only 42 cases over the eight year period, with non-specific contracted anus accounting for the majority of these cases. The presence of only three post-irradiation strictures may be due to the fact that we have treated very few malignant lesions in female patients.

TABLE V
INCIDENCE OF NON-NEOPLASTIC
RECTAL & SIGMOID LESIONS
IN 6000 CONSECUTIVE EXAMS.

	1st 2,000 cases		2nd 2,000 cases		3rd 2,000 cases		Total 6000 cases	
	No.	%	No.	%	No.	%	No.	%
Ulcerative colitis	24		24		22		70	
Amoebiasis	54		33		58		145	
Colitis, spastic & non-specific	95		61		59		215	
Diverticulitis	6		1		8		15	
Rectal ulcer non-specific	9		6		5		20	
Megacolon	2		2		3		7	
Laceration rectum	2				2		4	
Fecal impaction	1		4		5		10	
TBC enteritis	1		2				3	
Oxyuriasis	2						2	
Colon bleeding, cause undetermined	—		1		7		8	
Granulomatous ulcer, rectum	—		1		1		2	
Colitis, regional	—		2		—		2	
Colon obstruction cause undetermined	—		—		3		3	
GSW, rectum	—		—		1		1	
Foreign body abscess (chicken bone)	—		—		1		1	
TOTAL	196	9.8	137	6.9	175	8.7	508	8.4

Non-Neoplastic Rectal and Sigmoid Lesions

This group of rectosigmoid and colon lesions are frequently among the most difficult of all proctological diseases to treat but at the same time are some of the most interesting cases. Of the non-malignant lesions of the rectum and sigmoid the various types of colitis lesions are some of the most important diseases.

Ulcerative colitis can be crippling to the patient both mentally and physically and may endanger survival. Colectomy is often necessary and sometimes is a life saving procedure. Ulcerative colitis accounted for 70 cases; total colectomy was necessary in seven of these. A one-stage total colectomy was used in all seven cases with no mortalities to date. At the present time we speak only of remission not cure of this lesion. This disease does not appear to be increasing in frequency.

Amoebic colitis had about the same incidence as it did after World War II.

Neoplasms

Polyps were the most common benign neoplasms located in the rectosigmoid area and were present in 254 cases. Twenty of these or 7.9 per cent were carcinomatous, histologically.

The positive correlation between the frequency of the polyps and the age of the patient is important clinically. In 1946 and 1947 the incidence was 2.4 per cent. This increased to 6.5 per cent in 1953 and 1954. The incidence of polyps in our series is less than that reported by others. Young,⁸ in 1951 reported an incidence of 8.8 per cent in 500 asymptomatic patients seen at the Yates Clinic. In 1950, Hauch⁶ reported 8.1 per cent in 1,919 asymptomatic patients examined at the Mayo Clinic. These figures are much greater than that found by Castro² who noted an incidence of 2.4 per cent in 12,000 patients referred for proctologic examination. The average incidence reported in the literature ranges from 10 to 15 per cent.

It is evident that many people harbor a po-

TABLE VI
INCIDENCE IN 6000 CONSECUTIVE EXAMINATIONS

	1st 2,000		2nd 2,000		3rd 2,000		Total 6000	
	cases		cases		cases		cases	
	No.	%	No.	%	No.	%	No.	%
BENIGN								
Polyps	44		59		122		225	
Multiple polyposis	3		16		6		25	
Familial polyposis	—		4				4	
Lipoma	1		—		2		3	
Pigmented nevus	1		—				1	
TOTAL	49	2.44	79	3.94	130	6.5	258	4.3
MALIGNANT—6000 cases by biopsy								
Adenocarcinoma, rectum, without metastasis			57					
Adenocarcinoma, rectum, with metastasis			42					
Malignant polyp			12					
Polyp with atypism			8					
					Diagnosed by		gross appearance	
							101 or 80	per cent
Scirrhus adenocarcinoma			1					
Lymphoma			1					
Leiomyoma sarcoma			1					
Squamous cell carcinoma, anus			2					
Melanoma			1					
TOTAL			125					

TABLE VII
DEFINITIVE SURGERY AT VETERANS
ADMINISTRATION HOSPITAL
Patients receiving no previous treatment
or surgery elsewhere.

	No.	%
DIAGNOSIS		
Carcinoma of rectum	54	
Carcinoma of rectosigmoid	12	
TOTAL CASES	66	
OPERATIONS		
Palliative or inoperable	27	41
Palliative	22	
Mortality		13.6
Cure	39	
Mortality		2.6
RESULTS		
Total living and well (over three years)		52.6
Nodes positive	15	
living and well, 3 yrs.		20
Nodes negative	23	
living and well, 3 yrs.		74

tentially malignant lesion in a readily accessible portion of their lower bowel. Burns,¹ in 1955 found that 11 per cent of the polyps that he had biopsied, were malignant. In our series 7.9 per cent were malignant, again emphasizing the importance of routine proctoscopy in all patients over 40.

A clinical diagnosis of carcinoma was made in 101 of the 125 patients with cancer. The diagnosis of carcinoma could not be made grossly in the remaining 24. The diagnosis was substantiated histologically in all cases. Many

patients with advanced carcinoma, some following surgery elsewhere, are referred to this hospital for terminal care. The results of the 66 patients who received their definitive surgery at this hospital are summarized in Table VII. Only 20 per cent of patients with proven metastases in the regional lymph nodes were alive three years after operation, whereas 74 per cent of those in whom such metastases could not be demonstrated were alive and well three years after operation. This emphasizes the importance of early diagnosis and prompt operation.

Miscellaneous Lesions

Miscellaneous lesions were found in 413 of the 6000 patients. Some of these lesions are not easy to recognize clinically. They require an alert and experienced examiner. Yet, they are sufficiently frequent to merit routine proctoscopic examination of all patients over 40.

Summary and Conclusions

1. The results of the examination of 6000 patients referred to the Proctology Clinic of a Veterans Administration Hospital are reported.
2. Lesions of the anus, rectum or sigmoid were present in 76 per cent of the group.
3. Therapy with complete eradication of symptoms was possible in most of the patients.
4. Carcinoma of rectum or recto-sigmoid

TABLE VIII
MISCELLANEOUS LESIONS FOUND IN
6000 CONSECUTIVE EXAMINATIONS

	1st 2,000 cases		2nd 2,000 cases		3rd 2,000 cases		Total 6000 cases	
	No.	%	No.	%	No.	%	No.	%
Pruritis ani	40		24		59		123	
Pilonidal cysts	33		34		65		132	
Prolapsed rectal mucosa	9		8		8		25	
Pyoderma, buttocks	7		8		6		21	
Pelvic mass, neoplastic	11		12		18		41	
Pelvic abscess	1		4		3		8	
Incontinence, post-operative	—		1		1		2	
Perineal furuncle	3		3		2		8	
Condyloma acuminata	18		6		12		36	
Dysentery, bacterial	1		—		—		1	
Bulbourethral abscess	1		—		—		1	
Actinomycosis buttock	1		—		—		1	
Coccyalgia	2		1		2		5	
Eczematoid dermatitis	1		—		—		1	
Perianal leukoderma	1		—		—		1	
Sphincter defect with anal ectropion	1		—		—		1	
Seminal vesiculitis	1		—		1		2	
Dark field positive	1		—		—		1	
Sebaceous cysts	—		2		4		6	
Acute prostatitis	—		1		—		1	
Periurethral abscess	—		1		—		1	
Endometritis	—		1		1		2	
CA of bladder	—		—		1		1	
Pediculosis	—		—		1		1	
TOTAL	132	6.1	106	5.3	184	9.2	422	6.9

was found in 66 patients receiving their definitive surgery here. The cancer was inoperable in 27 and palliative operations were done on 22. The three year survival of patients with no demonstrable metastases in regional lymph nodes was 74 per cent, as contrasted with 20 per cent in whom metastases were found.

5. The importance of careful examination of the lower colon and rectum in all patients over 40 is pointed out.

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Gastro-intestinal allergy is a frequent cause of vague abdominal pain in childhood. In the past few years there has been an increase in the use of chocolate flavored milk in many children's diets. When this type of beverage is forbidden for a two weeks trial period the chronic stomachache often miraculously disappears.

RICHARD G. ELLIOTT, M.D.


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FIVE YEARS OF CAESAREAN SECTIONS IN THE LEXINGTON HOSPITALS*

GEORGE G. GREENE, M.D.

Lexington

THE PRACTICE* of obstetrics is often judged by the number of Caesarean sections done. This is usually true, whether the community in which the work is being done is small or large. As far as I know, there have been no reports coming from small communities. No doubt this is due to the fact that there is such a small number of Caesareans done that no one has felt there was an adequate number of case reports to be of interest or value.

Some states are making state-wide surveys of Caesarean section. The State of Illinois gave such a report in 1953,¹ covering 7,097 Caesarean sections done, a percentage of 3.59. In this group of over 7,000 Caesarean sections, there were only 3 deaths. Two of them were attributed to anesthesia. This certainly would represent a record worthy of favorable comment. A percentage range of 2 to 5 is considered to be about the average in well-organized obstetrical centers throughout the country. There are a few well-known and highly regarded institutions with a rate as high as 10 per cent. However, these institutions are very few in number and would, I feel sure, receive criticism from many obstetricians. Such institutions no doubt would point with pride toward their excellent maternal and fetal mortality rate and would use these as justification for their increased Caesarean rate. However, there is a point of diminishing returns which D'Esopo established at about 7 per cent. These higher percentages are certainly a contrast to previous teaching. Only about 15 years ago, the rate higher than 2.5 per cent was considered more toward the radical side.

Number of Deliveries and Caesarean Sections

There were 110 sections done at St. Joseph Hospital and 237 done at Good Samaritan Hospital during this five year study. This gives a total of 347 Caesarean sections or slightly over 2.6 per cent. During this time there were 5,872 deliveries at St. Joseph's and 7,642 at Good Samaritan. This gave a total of 13,518 deliveries for the five year period. During 1951

*From the Departments of Obstetrics and Gynecology, Good Samaritan and St. Joseph Hospitals, Lexington, Kentucky.

TABLE I

Number of Sections at both Hospitals for each year

St. J. H.	G. S. H.
1. 1949 - 17	1. 1949 - 35
2. 1950 - 27	2. 1950 - 44
3. 1951 - 13	3. 1951 - 48
4. 1952 - 18	4. 1952 - 41
5. 1953 - 35	5. 1953 - 69
6. Total - 110	6. Total - 237
Total at both Hospitals 347 or 2.6%	

the deliveries reached the greatest number for any one year, the number being 2,818. However, this was not the year in which the greatest number of Caesarean sections were done. There were only 61 Caesarean sections done during this particular year. The greatest number of

TABLE II

Number of Deliveries for each year at both Hospitals

St. J. H.	G. S. H.	Total
1. 1949 - 1216	1. 1949 - 1368	1. 1949 - 2584
2. 1950 - 1285	2. 1950 - 1317	2. 1950 - 2502
3. 1951 - 1158	3. 1951 - 1660	3. 1951 - 2818
4. 1952 - 1098	4. 1952 - 1619	4. 1952 - 2717
5. 1953 - 1115	5. 1953 - 1678	5. 1953 - 2793
6. Total - 5872	6. Total - 7642	6. Total - 13,518

Caesarean sections came during the year of 1953, when there was 104. The only explanation I know for this marked increase is the number of repeat Caesareans each year, and probably an increase in the indications in order to increase foetal salvage.

Patients Sectioned for the First Time

Since there is considerable discussion about the great number of Caesarean sections in

TABLE III

All ages with first baby

St. J. H.	G. S. H.
46	86
Total 132 or 50%	

Age thirty (30) and over with first baby

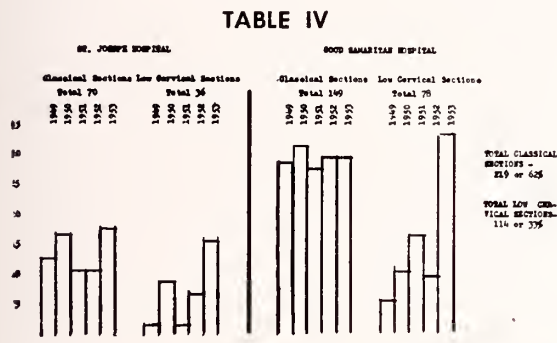
St. J. H.	G. S. H.
16	23
Total 39	

older primiparas, I thought it would be of interest to survey the number of patients that were 30 years of age and over, receiving Caesarean sections. I found that at St. Joseph hospital there were 16 women who were 30 years of age and over, and 23 at the Good Samaritan Hospital, making a total of 39. This group represents slightly over 10 per cent of the entire group.

Of those receiving a Caesarean for the first time, there were 46 at St. Joseph's compared to 86 at Good Samaritan, a total of 132. Roughly, this amounts to 50 per cent of the sections being performed on those women bearing their first infant.

Types of Caesarean Sections

It is of interest to see the trend of Caesarean sections as to type, whether classical, low cervical, or otherwise. I feel quite certain that there is a tendency for less and less classicals to be



done by most obstetricians. It is general opinion, although not definitely proved, that low cervical Caesarean scars will not be as likely to rupture with succeeding pregnancies. Numerous reasons are given for this, one being that the incision is more likely to heal better when located in the silent portion of the uterus, particularly when a transverse or elliptical incision is made. Infection possibly occurs less frequently, due to a better reperiotnealization of the incision of the uterus. This series shows a total of 219 classical sections and 114 low cervicals. This represents about two thirds classicals being done against one third of low cervicals. There were a few of other types, such as extra-peritoneal, Porro, etc. However, these represent only about one per cent of the entire group. It can be clearly seen that there is a tendency in Lexington for an increase in low cervical Caesareans, as evidenced by the ratio

of 8 low cervicals in 1949 against 50 low cervicals in 1953. In my opinion, this is a marked increase in the right direction.

Indications

Indications for Caesareans fall into five major groups in Lexington. Of course previous

TABLE V

Indications for Surgery			
Placenta Previa		Placenta Abruptio	
1. St. J. H.	- 21	1. St. J. H.	- 11
2. G. S. H.	- 18	2. G. S. H.	- 11
3. Total	- 39	3. Total	- 22
Inertia		C-P-D	
1. St. J. H.	- 14	1. St. J. H.	- 29
2. G. S. H.	- 28	2. G. S. H.	- 33
3. Total	- 42	3. Total	- 62
Repeat Sections			
St. J. H.		G. S. H.	
1. 1949 - 3	4. 1952 - 7	1. 1949 - 13	4. 1952 - 13
2. 1950 - 4	5. 1953 - 7	2. 1950 - 15	5. 1953 - 20
3. 1951 - 3	6. Total - 24	3. 1951 - 14	6. Total - 75

sections heads the list, as might be expected. There was a total of 99 repeat Caesareans, an incidence of 28.5 per cent. This comes about mainly from fear of rupture of the previous uterine scar. Even though the percentage of rupture is very small, usually not ranging over about .4 to 1.7 per cent, it always kindles a fear in the attending physician and usually influences him to decide in favor of a repeat Caesarean. He can always receive the necessary encouragement if he will only explain to his patient that, should the uterine incision rupture, the fetal mortality ranges from 80 to 100 per cent and the maternal mortality from about 20 to 40 per cent. There is considerable controversy as to which type of uterine incision will stand the test of a succeeding pregnancy. Different authors have different opinions on this subject and can, as a usual thing, give statistics to prove their point from the cases that they are surveying or have surveyed. Generally speaking, I believe that there are more articles with statistics showing a greater incidence of dehiscence in the classical section. Many have written on this subject. To name a few: Irving, Hindman, Siegel, Colving, Duncan Reid and others. More recently, Bremner and Dillon², reporting from the two hospitals at Evanston, Illinois, having given considerable time to reviewing different articles on this subject, have concluded that rupture of the classical section will be about three times as often as that from a low cervical Caesarean. Interestingly enough, these authors have studied multiple Caesarean

sections done at their hospitals and have reviewed 105 cases having three or more sections. Several of the patients have had five to seven sections. They concluded that there were not sufficient indications to warrant sterilization after the second or third pregnancy. There were only 2 instances of uterine scar rupture in the group. Both of these were incomplete. This is a remarkably low incidence.

Maybe one cannot be too certain as to which type of Caesarean will terminate in a rupture of the uterine scar. However, I believe it can be said that the classical scar is more likely to rupture prior to labor and that a low cervical scar will more likely rupture during the process of labor.

From this, it would seem more logical to allow a patient to proceed with a delivery through the vaginal route if she has had a classical Caesarean, provided that the process of labor begins satisfactorily, without any evidence of rupture of the scar.

Lane and Reid³ reporting on 697 repeat sections for a twelve year period at the Boston-Lying-In Hospital found that, of 451 delivered by low cervical operation and 246 by classical, 583 were sectioned again and 114 were delivered vaginally. There were sixteen silent dehiscences. Fourteen were lower segment operations.

In our group pelvic disproportion was second as an indication for Caesarean section. There were 62 cases in which this was the indication for Caesarean section, or 18 per cent.

Listed in third place was a triad of conditions, which are grouped together as inertia, exhaustion, and prolonged labor. These could be listed under almost either one of the three and cover the indication quite well. Usually the three are found together and were grouped accordingly. There were 42 patients having these as an indication for Caesarean section, or 12 per cent.

Fourth on the list was placenta praevia. There were 39 or 9 per cent of these.

In fifth place we find placenta ablatio, or partial separation of the placenta, being listed 22 times, or slightly over 5 per cent.

There were numerous other indications listed, some as associated indications, such as fibroid tumor, prolapse of the umbilical cord, abnormal presentation of the fetus, etc. I found that some condition of the cardiovascular system was

mentioned 17 times. However, there was only one instance in which the heart condition was listed as the primary indication for section, that being mitral valve disease. Chronic nephritis was found listed eight times as an associated indication. There were only two or three instances of diabetes as a primary indication. Some form of toxemia was found as an indication or associated indication in 13 cases. Fulminating toxemia was listed as indication only once or twice. It was gratifying to see that toxemia does not have a prominent place in the indications for Caesarean section in Lexington. It is agreed by most obstetricians that fulminating toxemia is never an indication in itself for Caesarean and that the toxemia should always be treated first before a thought of a Caesarean should be entertained.

Puerperal Sterilizations

About six or seven years ago the obstetricians of Lexington concluded that it would be worthwhile to institute some definite outline to follow in the Good Samaritan Hospital regarding sterilization. The executive committee approved our recommendation requiring that two consultants should agree with the operating surgeon that a sterilization was indicated, unless

TABLE VI

Number of Tubal Ligations done each year

G. S. H.	
1. 1949 - 14	
2. 1950 - 13	
3. 1951 - 12	
4. 1952 - 13	
5. 1953 - 17	
6. Total - 69 or 21% of G.S.H. Sterilized	- -

it should be a case of a repeat Caesarean section, at which time the decision would be left with the patient and doctor.

I was interested to see the trend of sterilizations in Good Samaritan Hospital since the institution of this regulation. There were 69 sterilizations done, or 21 per cent, on these 347 Caesarean section patients. I feel sure that practically all of these were done on patients who were receiving repeat sections. As you will recall, there were 99 such cases. About two-thirds of the patients receiving repeat sections were sterilized. It would appear that the incidence of sterilization has gone up instead of down since the institution of our regulation. However, the number of Caesareans done in

1953, compared with that of 1949, (52 in 1949 and 104 in 1953) shows an increase of 100 per cent in the number of sections and only an increase of 3 sterilizations in this additional 52 cases. This would indicate that our new regulation on sterilization has definitely decreased the number of sterilizations.

Morbidity and Mortality

There were 41 cases of morbidity, most of these being at St. Joseph Hospital where there was a lesser number of Caesareans performed. One may readily ask the reason for such a great increase in the number of morbidity cases at St. Joseph's. I do not know the answer.

TABLE VII

Morbidity	Stillborn Babies
1. St. J. H. - 33	1. St. J. H. - 4
2. O. S. H. - 8	2. O. S. H. - 6
3. Total - 41	3. Total - 10

There were considerably more service cases being operated on at St. Joseph's and, as would be expected, there is usually a greater increase in morbidity in these cases. Too, some increase might possibly be attributed to the fact that a number of these cases were operated by the resident staff, which might tend to increase the morbidity, as they were in their training period. However, I would not consider this too likely.

I found that there were 10 stillborn infants, giving an incidence of 3 per cent. Studies from San Francisco and New York have reported 10 and 6 per cent respectively. There were probably several neonatal deaths that we do not know about, which might have raised our percentage slightly. I believe that one can often lower infant mortality rates by correcting so as to exclude the so-called immature infant. It is my sincere hope that the day is not too far away when Kentucky will abandon the present method of tabulating births. Our neonatal death rate will continue to be inaccurate and our statistics compare poorly until this problem is rectified. When we start tabulating births at 6½ months duration, then we will have a reasonable time limit by which we can gage viability and obtain a sensible and reasonable statistical picture of what actually is occurring in our state. This I consider perfectly reasonable. Infant mortality, in my opinion, is definitely higher where premature infants are delivered by Caesarean section. It has been estimated by some that the ratio is about 6 to 1

as compared with full term infants. If a mother is at term when she is sectioned, it would appear that her infant has as good a chance to survive as that of a mother who has a delivery by the vaginal route.

I believe that we can justly be proud of the maternal mortality rate for the five years studied in Lexington. It was found that only one Caesarean patient expired. Apparently polio was the cause of the death and not the Caesarean. It seems that the section was done as the fetal heart tones were irregular, with the hope of possibly salvaging the baby. This gives a corrected rate of zero, which we hope will continue to be the case for many years to come.

A Comparative Summary

I felt that it would be desirable to take other reports and use them in a comparative sense. For this I selected two university hospitals that seem to have had a number of patients studied comparable to those here in Lexington. I took one report from a private hospital in Boston⁴, apparently handling a slightly smaller number of obstetrical patients, but near enough to give some idea of how the private hospitals in Lexington compare with another hospital in the Eastern part of the United States.

The number of deliveries was comparable throughout, the two university hospitals having almost the same percentage as the Lexington hospitals, with the private hospital studied, having almost twice as many Caesareans being performed. It was interesting to see the type of section being done in each hospital. It will be noted that the two university hospitals were doing a large number of classical operations, as we have been doing here. However, the

TABLE VIII

	Lexington	Univ. of Kan. (24 years)	St. Louis Mat. Center (1948-52)	Boston Hospital (3 years)
Deliveries	13,518	15,871	17,376	5,871
Sections	347 - 2.5%	471 - 2.9%	407 - 2.3%	727 - 6.7%
Classical	219 - 62%	344 - 73%	183 - 45%	382 - 95%
Low Cerv.	114 - 33%	104 - 22.5%	191 - 47%	7 - 2%
Repeat Sections	99 - 28.5%	32.3%	70 - 17%	184 - 46.1%
Maternity Mortality	1	10	0	0
Infant Mortality	10 - 3%	7.2%	4.7%	1.9%

private institution in Boston has only about 2 per cent classical Caesareans as compared to 95 per cent of low cervicals. The St. Louis Maternity Center⁴ was doing about a 50-50 ratio. It

will be remembered that the last year in Lexington has seen a marked increase in low cervicals, and I believe there will be even a greater increase in 1954 and 1955.

Relative to the repeat Caesarean section, to which I have devoted considerable time in this article, there is some variation. This is particularly so at Boston, where over 46 per cent of the Caesareans were performed because of previous section.

As to indications other than repeat sections, it will be noted that cephalopelvic disproportion is consistently second, with the exception of St. Louis Maternity Center, where it ranks first. Placenta praevia is third in all of the hospitals except Boston. In this institution, partial separation of placenta slightly exceeded that of placenta praevia. It is interesting to note that diabetes was a prominent indication for Caesarean section at the University of Kansas and St. Louis Maternity Center. It is possible that there are more diabetics in this area. It certainly points in that direction at St. Louis. Diabetics usually have a higher instance of infertility, but this does not seem to be true in St. Louis.

As to infant mortality, only Boston has a better record than Lexington. In reviewing the maternal mortality, it will be noted that three of the hospitals have no maternal mortality. The University of Kansas⁷ has had ten maternal deaths out of 471 sections, which is certainly a very high maternal mortality rate. This instance of maternal mortality needs some clarification. It is to be expected that a university hospital would receive a number of moribund patients. Reviewing these 10 deaths, it will be found that only 4 of them died during the years studied here in Lexington. In one of these cases, the patient had acute myelogenous leukemia. Another had a malignant brain tumor. The third had acute bulbar poliomyelitis. The fourth died from respiratory paralysis following spinal anesthesia. Actually, there was only one death that could be associated directly with the Caesarean section. When a more detailed study is made as to the cause of each death, the statistical report is much better.

Summary

A five year study of Caesarean sections in Lexington, from 1949 through 1953, reveals

that there were:

- (1) 13,518 deliveries in the two Lexington hospitals.
- (2) An incidence of 347 Caesarean sections, or 2.6 per cent.
- (3) Classical Caesareans out number low cervicals for this five year period, the ratio being almost 2 to 1. However, there is a marked increase in low cervicals being done within the last 2 or 3 years.
- (4) The most frequent indication for Caesarean was repeat section. Cephalopelvic disproportion was second, while placenta praevia and partial separation of the placenta were third and fourth respectively.
- (5) Morbidity was relatively low. Infant mortality at delivery was 3 per cent. Maternal mortality revealed that one patient died following Caesarean from paralytic polio, giving a corrected mortality of zero.
- (6) Finally, a comparison with three other institutions having similar obstetrical services was made, two being university hospitals and one a private hospital. They compare favorably.

Personally, I have been very much pleased with the statistics from the five year study made here in the Lexington hospitals. There is only one condition that I would like to see changed to any degree. That is a greater trend, as the years go by, toward low cervical Caesarean, particularly the transverse incision. I believe this particular type of operation will achieve more favorable results in several ways.

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CASE DISCUSSIONS



A CASE OF SEVERE DISABLING RHEUMATOID ARTHRITIS

From the University of Louisville Hospitals
Louisville General Hospital

Presentation by Rex O. McMorris, M.D.

HISTORY

THIS 49-year-old white female was admitted to the in-patient service of the Rehabilitation Center on May 2, 1955 with a chief complaint of having been bed ridden for the past two and one-half years and not having walked for three years due to severe generalized rheumatoid arthritis. The patient had been treated in the arthritis clinic of Louisville General Hospital for ten months where she received Cortisone, 50 to 100 mgm. daily and analgesics for her arthritis. On admission the patient had complaints of epigastric distress relieved by food. For the past six months she had shortness of breath, urinary frequency, nocturia, and pruritis vulvae. She had been spending all of her time in bed making it necessary for her daughter to stay in attendance and answering her needs, being transported to and from the arthritis clinic by ambulance.

Physical Examination

Examination at the time of admission revealed an obese white female who appeared older than her stated age, unable to raise herself from bed without pain, unable to bear weight on her elbows, with very evident flexion contractures in her hips and knees. Eyes, Ears, Nose and Throat were not remarkable. Her teeth were carious and in poor repair. Examination of the lungs revealed bilateral basal rales. Heart sounds were distant, rate and rhythm within normal limits. The liver was palpable just below the right costal margin. The abdomen: obese, soft, no masses palpated. A plus one ankle edema was noted. The extremities revealed the following findings: In testing for range of motion, hips would flex to a range of 120°, bilaterally, having minimal or no rotation. Will not abduct beyond 20° without pain

in the lateral aspect of the hip over the greater trochanter, bilaterally. Right knee had approximately 35° range of motion from a flexion contracture of 10°, the left approximately the same. The ankles were limited to approximately 45° of motion in flexion and extension from a position of 100° dorsiflexion. The right wrist was puffy, the hands were deformed with a typical ulnar deviation, but she could get a 90% fist on the left and approximately 50% on the right. The elbows both had approximately 10 to 15° flexion contracture and could flex up to approximately 30°, of the forearm in relation to the arm. The right shoulder was limited to 90° flexion, 60° abduction, 15° external rotation, and 90° internal rotation. The left shoulder was almost normal in range of motion. Muscle strength graded from fair to good throughout the extremities. The neck showed limitation of motion in all directions.

Admitting Diagnoses

(1) Advanced rheumatoid arthritis, grade four, class four. (2) Fluid retention, secondary to cortisone (3) Possible peptic ulcer.

Laboratory Findings

On admission the urinalysis was within normal limits, the blood count revealed a hemoglobin of 9.95 grams per cent with a white count of 15,800/cm of which 77% were polymorphonuclear cells, 21% lymphocytes, and 2% eosinophiles. N.P.N. was 31 mg. %. Blood chloride was 94 mEq./l, blood sodium was 131 mEq./l, and blood potassium was 5 mEq./l. X-ray of the chest showed a small amount of pleural thickening in the bases, but no active cardiac or pulmonary pathology was seen. Upper G.I. examination revealed no evidence of ulcer of the stomach or duodenum. Electrocardiogram was normal.

Hospital Course

Her arthritis was treated medically with Meticorten, 5 mgm T.I.D. and 10 grs. A.P.C. q.i.d. She was placed on an ulcer regime including anti-spasmodics and antacids. A fluid retention responded to mercurial diuretics and low salt regime. She was also placed on a total physical rehabilitation program consisting of Hubbard tank, active and active assistive exercises, passive stretching of all the joints to maintain range of motion, progressive resistive exercises to the quadriceps and hamstrings, gait training directed toward unsupported walking, occupational therapy for the upper extremities to increase range of motion and strength and dexterity, bicycling to increase range of motion of the lower extremities. She was counseled socially and psychologically and a recreational therapy program was instituted, within her physical limitations. Activities of Daily Living training was carried out throughout her hospital stay.

The patient made remarkable progress. Within approximately six weeks she was able to perform all self-care activities except those activities which required reaching her feet. She became ambulatory for the first time in three years. She became able to get in and out of bed with assistance of a chair, able to arise and sit in an 18" chair, able to walk considerable distance—300 yds. at a time, on and off toilet, dressing herself, and many other activities. Pain in her hips and knees were treated by intra-articular injections of Hydrocortone. During her hospital regime the anti ulcer regime was maintained. Fluid retention was easily controlled, with low salt diet, diuretics and change from cortisone to Meticorten. At the time of discharge on 7-15-55, the above noted low hemoglobin was found to be 10.6 gms. Her appetite was good, and the regular diet had im-

proved her nutritional state. At no time was there any evidence of bleeding. At discharge, after approximately 10 weeks of concentrated physical treatment and medical treatment, this woman was ambulatory and independent in her activities of daily living, whereas the patient had previously been a tremendous nursing problem. Her daughter was therefore released from this burden and able to seek employment.

DISCUSSION—RHEUMATOLOGY SECTION Louisville General Hospital

Robert L. McLendon, M.D.: This patient is a typical example of the distressing circumstances that so frequently follow the ravages of peripheral rheumatoid arthritis. These totally crippled nursing problems present a major challenge to all of us who deal with this disease. All too often these patients are allowed to drift slowly into the realm of complete helplessness due to the failure of the personal physician to know or to accept the responsibility of providing total physical rehabilitation during the acute stages of rheumatoid arthritis. It is during the active and early stages of this disease that such a rehabilitation program as was given this patient can most successfully and profitably be instituted. The results achieved in this patient were truly remarkable and makes it mandatory that if we as physicians accept patients with crippling arthritis as our responsibility, we must offer an adequate home or hospital physical rehabilitation program as an essential part of the treatment. Simple methods of applying heat in the home and instructing a member of the family to carry out passive stretching of the joints and the guidance of active exercises within the patient's tolerance can aid in avoiding some of the advanced crippling of rheumatoid arthritis.

Equipped with his five senses, man explores the universe around him and calls the adventure Science.

—Edwin Powell Hubble

SPECIAL ARTICLES

TEACHING AND RESEARCH RESPONSIBILITIES OF HOSPITALS*

VICTOR JOHNSON, PH.D., M.D., D.Sc.,**

IT IS a privilege to be in Louisville on the auspicious occasion of the opening of the Expansion Fund program of Jewish Hospital. You have come a long way since the day scarcely more than 4 years ago when you presented to the Hospital Advisory Council the plans to build your new hospital as part of the University of Louisville Medical Center. Today, only two years after opening this splendid institution your driving unrest, and your impatience with anything short of the best, have launched you into a program to more than double the size of your hospital and much more than double its effectiveness and importance. Most heartily do I congratulate the board and staff and friends of Jewish Hospital for what you have already accomplished, and for the goals you will reach, beyond doubt, in the months ahead.

The opportunity to speak about the teaching and research responsibilities of hospitals on this occasion is particularly attractive to me, partly because I know that, in general, better care for the sick is provided by hospitals that engage in teaching and research. But, more particularly, I desire to insist that such research and especially teaching, with resultant improved medical care, are equally appropriate to private hospitals like yours or to charity institutions like Louisville General Hospital.

My firm conviction of this truth emerges from my total medical educational and professional experience which has been entirely in

private institutions. I have never been a student, investigator, teacher, or administrator at other than private institutions operating private hospitals.

U. S. Hospital

For example, the medical school of the University of Chicago operates a private hospital in which junior and senior medical students are usually the first professional people to meet the private patients to inquire into their illness, make a physical examination, arrive at a tentative diagnosis, and consider what further studies of the patient may be indicated. True, every essential step in this procedure is repeated and checked by a member of the hospital staff, unobtrusively but thoroughly. But the medical student is part of the team managing the patient and his illness.

It is most unusual to encounter resistance to this procedure from patients. On the contrary, the young medical student is likely to devote so much total time and study to the patient as to become the most prominent member of the medical care team, in the eyes of the patient. Many a professor of medicine has been asked by a patient whether his decisions coincide with those of "that first doctor who saw me."

Mayo Foundation

Again, at the Mayo Foundation we have no medical students, or interns. Our fellows are physicians whose basic medical training is complete and who come to us for three or more years for education and training as residents in the various specialty fields of medicine, from anesthesiology to urology. These physicians secure their advanced medical education in the private hospitals affiliated with the Mayo Foundation—St. Marys and Rochester Methodist hospitals, with some 1,500 private hospital beds. Here again, private hospitals are engaged

*Presented at Jewish Hospital, University of Louisville Medical Center, Louisville, Kentucky, February 6, 1957.

**Director, Mayo Foundation for Medical Education and Research,† Vice-Chairman, Council on Medical Education and Hospitals, American Medical Association, Rochester, Minnesota.

†The Mayo Foundation, Rochester, Minnesota, is a part of the Graduate School of the University of Minnesota.

in training specialists in the largest educational program of its kind in the world.

A further example: one of the most fruitful periods of my work at the University of Chicago was in physiologic research with L. N. Katz, M.D. at a hospital, not a part of the university system, but again a private institution, Michael Reese Hospital in Chicago.

I cite these personal experiences to indicate that private hospitals, like yours, can effectively engage in the basic education of medical students, the advanced training of specialists, and investigation into the causes and control of disease. It may well be said that the private hospitals in my personal educational experience are large, well established, endowed with long years of tradition. But once they were no larger, older or more renowned than Jewish Hospital in Louisville. And never did they command a more loyal dedication of the community than you possess.

More than Healing

It must become abundantly clear to responsible people that the functions of a hospital (in which term I also include the professional and ancillary staff) encompass far more than healing. Indeed, there was a time when hospitals did not even operate very effectively for healing purposes. They were places where you went to die. Today, they are institutions where you go to get well. But the modern hospital, with its staff, will fall short of its goal if its efforts are limited to providing medical care. In fact, if that be the single aim, the care of the sick will leave something to be desired. A hospital and its staff must seek, not only to heal, but also to discover, and to teach.

Not long ago, in Milwaukee, Wisconsin, a phenomenally successful program for hospital support employed a booklet, "With Singleness of Heart" which referred to hospitals as having "closely integrated the care of the sick with the equally vital functions of scientific research and professional education." These "vital functions" of healing, discovery and teaching are too intimately interdependent to be considered as distinct activities. They constitute a single fabric, not three separate skeins. They are the same object, viewed from three vantage points.

Naturally, the emphasis upon one or another of these three facets must vary tremendously in different institutions. Few hospitals are able to equal the deeds of the University of Toronto

about 35 years ago. Banting and Best had devised a new method of extracting a substance from the pancreas which, upon injection into experimental diabetic dogs, prolonged the lives of those animals. The new compound—insulin—was purified. Would it work on human diabetic patients? The answer, in the affirmative, was provided in the hospitals of the University of Toronto. As a result, thousands of diabetics in this country are living useful, relatively normal lives, instead of succumbing to invalidism or death.

Control of Pernicious Anemia

It is given to but few hospitals to provide the world with the means of effectively controlling pernicious anemia, which, until some 30 years ago, was as uniformly fatal as inoperable cancer. Minot and Murphy, at the hospitals of Harvard University, were impressed by the laboratory experiments of Whipple, then in California. Whipple discovered that dogs made anemic experimentally would recover from that anemia very quickly if they were fed large quantities of liver. In the Harvard hospitals there arose the question "Might not liver administration control pernicious anemia in our human patients?" And so they fed liver—in large quantities—in every conceivable form and semipalatable disguise: raw, fried, boiled; liver juice, liver salad, liver cocktails. Some patients were inclined to say, "Thanks just the same, but I'll stay with my pernicious anemia." Nevertheless, liver feeding did control the human disease. Fortunately, the active ingredient of liver can now be injected at intervals. Cessation of the injections means certain death. Your Louisville hospitals employ these extracts every day.

In the instances of these hospitals, basic research loomed large, and the immediate task of healing was relegated to a temporarily unimportant position, postponed in anticipation of a resulting augmented healing armamentarium. Yet, the goal of healing was always in sight, even though research occupied the foreground.

The Inquiring Mind

In your own excellent hospital the immediate goal of healing must necessarily be inscribed in boldface capital letters, but discovery must also be written, if only within parentheses. The essential ingredient of a scientific investigator is an inquiring mind, disciplined in the

search for truth. This also is one indispensable requisite (coupled with human understanding and kindness) of the good physician. In every case under his care, the good physician conducts a scientific investigation. He collects isolated facts in his questioning and examination of a patient, from which he formulates a hypothesis, which he calls a diagnosis. From his hypothesis, or diagnosis, he makes certain deductions, such as that a cancer of the stomach might well result in a characteristic x-ray picture, or that a coronary occlusion should cause a specific change in the electrocardiogram. A verification of these deductions substantiates the hypothesis and points the direction of treatment. True, the physician may not compartmentalize his thought sequences in this stereotyped manner, but he does pursue this pathway of scientific or research reasoning, nonetheless.

Schooled and practiced in this approach to the problems of his patients, the physician of inquiring mind, disciplined in the search for truth, is impelled to carry on some modest investigation, to contribute in some measure to an increased understanding of man in health and disease, to light a candle in some murky corner, while still conceding that it is for others to cast penetrating beams of bright light into the deep darkness of the unknown.

The busy hourly demands upon the practicing physician necessitate that the function of providing medical care constitute the front elevation of the hospital in which he works. But the good physician, with intellectual curiosity, requires some ingredient of research investigation, be it ever so humble. The interplay of discussion between a staff physician and his intern or resident, in conferences or on rounds, commonly and constantly poses unanswered questions which stimulate one or another of them to search diligently for an answer, in textbooks, in medical journals, in laboratory research or in clinical investigation.

Responsibility of Education

However limited may be the research opportunities of a hospital and its staff, however compelling may be the demands for the care of the sick, the hospital which would heal best cannot escape the responsibility of education. Nothing quite sharpens the thinking of a physician regarding his patient like the necessity for explaining his ideas to a medical student, intern or resident. The very name "doctor" means

"teacher." The traditional desire of a physician to teach stems not only from an idealistic urge to impart useful knowledge, but also from the practical realization that teaching educates both teacher and pupil. I would paraphrase Bacon's truism to read, "Teaching maketh an exact man."

Especially in recent decades, it is amazing to what extent hospitals and their staffs have become professional educational institutions. Until about 30 years ago, the interests of the American Medical Association in professional education centered chiefly upon undergraduate medical education. The A.M.A.'s Council on Medical Education was concerned primarily with the establishment and maintenance of high educational standards in medical schools. In 1920, this body changed its name to the Council on Medical Education *and Hospitals*, in recognition of the increasing extent to which hospitals were becoming responsible for important segments of the education of a physician. Toward the end of his sophomore year, and throughout most of his junior and senior years, the medical student works in a hospital. In the country at large, of the 28,748 medical students more than half are working in hospitals. Here they examine patients, carry out tests, and generally participate, under supervision, on the team headed by the staff physician, in attacking the problems of diagnosis and therapy.

Teaching at Jewish Hospital

Starting about a year ago, Jewish Hospital has been so employed in teaching medical students internal medicine, and it has included instruction in surgery also, this year. I am aware that Jewish Hospital has entered into the teaching program of the University of Louisville medical school with a most exemplary wholeheartedness, not universally displayed by hospitals affiliated with medical schools.

With the tremendous increase in voluntary medical and hospital insurance in this country, there is developing a shortage of charity patients, which have traditionally been employed in medical education. That tradition is also disappearing, because of the universal experience that medical care is improved in any hospital engaged in medical education.

I recall a striking illustration of this development in a hospital in a southern city (not Louisville), where white and Negro patients were segregated. The local medical school be-

came affiliated with the Negro division of the hospital. The presence of supervised medical students, with their curiosity, their insistence upon clear explanations, and their persistence in pursuing diagnostic possibilities resulted in such an improvement in the care of the Negro patients that the white patients demanded similar privileges and insisted upon the inclusion of the white division in the medical school's teaching program.

Hospital Education

The expanding role of the hospital in education *beyond* graduation has become such that today the American Medical Association annually appropriates more money, expends more time and effort, and provides a larger trained staff to advise and survey hospitals than for consultation to medical schools, in promoting high levels of education for physicians.

In the total education of physicians, hospitals now occupy a position of importance paralleling that of the classrooms and laboratories of our medical schools. A medical school graduate today, who wishes to become a specialist, has just half-finished his professional education when he receives the M. D. degree, for he anticipates four or more years of additional training in approved hospitals, one as an intern and three more as a resident in advanced or graduate education.

It is interesting that in 1913, no medical school or state examining board required an internship for the M. D. degree or for licensure. Yet, 70 per cent of medical school graduates of that day voluntarily elected to take this year of hospital training. Even now, when nearly one half of the states still do not require an internship for licensure, virtually every medical school graduate who plans to practice medicine chooses a year of hospital internship.

Again, although the law imposes no additional educational requirements upon a physician who desires to be a specialist, the self-discipline and conscience of individual physicians and the medical profession at large have required that there be an additional period of supervised training in an approved hospital, usually of three or more years' duration.

The law says, to be a physician, you must devote four years to undergraduate medical education. The physician who wishes to become a surgeon, a psychiatrist or an obstetrician, for example, says, "I need hospital training for at least four years beyond the legal requirement."

This is a notable example of self-determination and self-discipline by the physicians themselves and by their national organization, the American Medical Association.

The magnitude of hospital participation in the education of physicians becomes apparent in noting that there are now, in this country, 862 hospitals training interns and 1,211 hospitals approved by the American Medical Association for the advanced training of specialists. In the advanced educational programs of these hospitals there are now 31,028 medical school graduates (9,603 interns and 21,425 residents). This astonishing number exceeds the total number of medical students in all the medical schools of the country. For every 100 undergraduate medical students there are about 108 physicians in internships and advanced specialty training programs. Since more than one half of the medical school undergraduates are also in hospitals, it is simple to compute that for every medical student working elsewhere than in a hospital, there are about three medical students, interns or residents pursuing medical education in a hospital.

Jewish Hospital, educationally relatively young and inexperienced, has strikingly outdistanced reasonable anticipation in its teaching of medical students, and in its program for training interns and residents in collaboration with Louisville General Hospital.

Hospitals occupy a dominant role in the education of members of the health team other than physicians. As you know, "nurse training schools" and "hospitals" are virtually synonymous words. Many hospitals, in addition, conduct organized schools for the training of laboratory technicians, physical therapy technicians, x-ray technicians, medical record librarians, and occupational therapists.

In these health fields, Jewish Hospital, again, has made auspicious beginnings, notably in the education of medical record librarians. It will engage in further educational enterprises of this nature in due time, beyond doubt.

My purpose in recounting these multiple educational activities centered in hospitals is not primarily to inform you, because many of you are well aware of these responsibilities, challenges and privileges. Rather, I wish to remind you that, in the work of the Jewish Hospital Expansion Fund, you will be part of a scene with broader horizons than you realized.

(Concluded on Page 452)

PAINLESS SAVING IS TREASURY AIM

The proposed changes in the Savings Bond program are designed to maintain the attractiveness of E and H bonds as the nation's most important regular plan for cash saving out of wages.

At the same time, other changes are proposed, according to the Treasury, to weed out larger and more sophisticated investors who have shared the privilege of a guaranteed interest rate and freedom from market fluctuation.

One out of five of the 50,000,000 American families bought bonds last year, young persons to buy homes and furniture, persons in their middle years to educate their children, older persons for retirement income.

Automatic Feature Valued

In almost every case, the survey found, buyers valued purchase of bonds as an automatic, easy route to regular saving. In plants and offices where the payroll savings plan was not available, 44 per cent of the family breadwinners said they wanted an opportunity to sign up. An even greater proportion, 53 per cent, of their wives said they wanted payroll savings.

The survey pointed up the fact that the Savings Bond program had become an important help to the average American family in getting along on what it earns. For this reason, failure to permit Savings Bond yields to follow other interest rates upward could be viewed as more than injustice. It could be interpreted as a deterrent to thrift.

Significantly, the Treasury's proposal would permit Savings Bonds to enjoy a measure of the rate flexibility now enjoyed by marketable Government securities. The Treasury is asking permission to increase the Savings Bond rate, if necessary, to as much as $4\frac{1}{4}$ per cent.

Change Would be Rare

But changes would occur infrequently, not more often than every four or five years. And no attempt would be made to do more than have the Savings Bond rate follow the general interest pattern.

At the moment, the yield to maturity would be increased from 3 to $3\frac{1}{4}$ per cent on E bonds by shortening the maturity. Also, redemption valued in the early years would be increased.

Even under the revised interest schedule, however, it would be three years before E bonds would pay out the 3 per cent now permitted on commercial bank savings deposits. An even longer period would be required if the effect of compounding of bank interest is considered.

The new rates are expected again to make the bonds competitive. These include maximum safety, the freedom from market fluctuation, the guaranteed interest rate and protection against the physical loss of the securities.

Big Investors Depart

If the Treasury has sought to maintain the attractiveness of Savings Bonds for the average American family, it has indicated that it thinks the larger, knowing investor should take his chances with others in the marketplace.

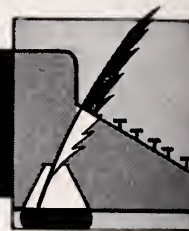
It did this by dropping entirely its J and K bonds after April 30 and by reducing from \$20,000 to \$10,000 the amount of E and H bonds one individual may purchase in any year. This reflected a decision to get out of J and K bonds into higher-yielding, marketable Government securities and a continuation of the policy shift toward flexible interest rates.

The Treasury said that sale of fixed-interest securities to large investors, among them banks and other institutions, had served its purpose in World War II, but was needed no longer.

(Prepared and submitted by John U. Courtney
U. S. Savings Bonds Division for Kentucky)



EDITORIALS



THE JENKINS-KEOUGH BILL

THE Jenkins-Keough bill as amended in the house ways and means committee allows a self employed person to deduct from gross income each year a limited amount of earned income contributed by him to a restricted retirement annuity contract. He can deduct annually up to 5 thousand dollars or 10 per cent of earned income, whichever is less, but not more than a total of one hundred thousand dollars during his lifetime.

An individual who has reached age 55 years before the effective date is allowed to deduct an additional amount to help him build up an adequate interest in the fund or obtain more than a token annuity. In his case the normal deduction is increased by 500 dollars or 1 per cent of his income, whichever is less, multiplied by the number of years his age exceeds 55, with a maximum average credit of 20 years.

On attaining age 65, or earlier under certain conditions, he will get back his contributions to the fund plus their accumulated earnings in one of three ways elected by him: (1) a lump sum; (2) annual, quarterly, or monthly installments over a period of years; (3) one or more single premium life annuity contracts.

At present, certain tax advantages are extended to participants in qualified employee pension and profit-sharing plans. If an employer, under the law, contributes any amount to an employee's retirement fund, the employee benefits by this sum, but he is not taxed for it. There is at present no such provision for the benefit of a self-employed person. The Jenkins-Keough Bill proposes to provide a correction for this inequity.

This form of legislation has been under consideration for several years. It was introduced as the "Individual Retirement Act of 1955" seeking to secure tax deferment privileges long

available to those who work for others but denied those who are self employed.

The bill had bipartisan backing and was endorsed by leading spokesmen of both political parties. The secretary of the Treasury grants that present revenue laws are unfair to those who provide their own employment. The American Bar Association and many state and local bar associations strongly supported it, yet it died in the Ways and Means Committee.

The A. B. A. is now organizing vigorous and sustained action in support of this bill which will be presented to this congress. The American Medical Association, having long ago endorsed its purpose, will also organize nation wide support among self employed member physicians and will solicit the cooperation of all similarly interested groups and individuals.

On January 31, 1957, representative physicians, lawyers, dentists, accountants, pharmacists, realtors, farmers, business men, ministers, and others met to form an organization known as the American Thrift Assembly, the sole purpose of which is to secure enactment of the Jenkins-Keough Bill. The A. M. A. endorses and actively supports this movement. David Allman, M.D., our president-elect, is on the steering committee of this new organization which proposes to procure correction of tax inequities long affecting some ten million self-employed persons.

This effort, to be effective, must extend to the state and county society level and claim the aggressive participation of individual physicians. We will be called upon to add our personal endorsement to the plan and to participate actively in the effort to secure the passage of such a law. More detailed information will be available as organized effort gets underway. It behooves us to give active support in every way possible.

SAM A. OVERSTREET, M.D.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

A BRIGHTER HORIZON

THE hopelessly incurable cancer patient is truly the one who mars the glow and richness of the practice of medicine. The physician finds himself face to face with this perplexing problem all too frequently. What should you do in such a case? Should the patient know the truth?

In giving this problem careful thought, we must first ask ourselves if there is anything to be gained by telling him the truth. We are not considering now the question of the physician's ethical obligations to tell the truth, or the patient's own basic right to know the truth as an end in itself. Rather we are considering what value the patient himself might receive if he learns the truth.

If the patient asks a straightforward question, he is naturally given an unequivocal answer. In the many remaining instances, the decision of judgment is usually left to the family or else based on whether the patient's constitution appears strong enough to absorb such a shock. These cases where no information has been afforded the patient, and there remains only a matter of weeks or months before he succumbs attract our attention now and present the problem.

Does the belief in an eternal life in any way influence our decision? Those who would profess Christianity as revealed in Jesus Christ naturally hold to his teachings on eternal life. This immediately entails then the basic question, "If there is an eternal life, can this particular patient rest assured that he is among those chosen for this heaven of tomorrow?" Upon what does a man's salvation rest?

Many people have the conception that a man's destiny depends upon how good a life he has lived. If such were the case, the patient's fate would have been determined by this time. In the pursuit of an adequate answer to this question let us look to the Bible which says, "For by Grace you have been saved through faith: and this is not your own doing, it is the gift of God. It is not because of a man's works, lest any man should boast." From thence comes the view of many of us that salvation is not dependent on this patient's (or any man's) previous life in the weighing of his good or bad, but rather simply as a pure gift in the grace of God, through Jesus Christ.

When a man willingly chooses to entrust his life to God in Christ, and follows through with a persistent consecration exercised by faith, he has fulfilled those pre-requisites outlined in the Bible. It is then this choice, but an all important one, which opens the door for Grace to come in and this man's salvation to be assured. Confronted with such an idea as this, it becomes distinctly our duty to allow this patient the privilege of knowing he has only a very limited time to make such a decision. During this short remaining time that previously had appeared so desolate and hopeless, he may make decisions which lead him into a meaningful and joyful relation with Christ, a relation that makes death no longer a thing to fear.

As we consider the age-old question, "If a man dies, shall he live again?", the answer clearly appears, "But the free gift of God is eternal life in Christ Jesus our Lord."

HERBERT N. HARKLEROAD, M.D.

THE WORLD MEDICAL ASSOCIATION

LOUIS H. Bauer, M.D., Secretary of the World Medical Association, invites all physicians in good standing to consider the advantages of membership in this organization. This society, in cooperation with the Red Cross, the International Committee on Military Medicine and the World Health Organization has adopted an emblem and outlined a code of ethics which it is hoped will serve as a guide to both military and civilian physicians in time of war and peace.

The code contains these statements: "The primary obligation of the doctor is his professional duty; in performing his professional duty the doctor's supreme guide is his conscience. The primary task of the medical profession is to preserve health and save life. The doctor in emergencies must always give the required care impartially and without consideration of sex, race, nationality, religion, political affiliation or any other criterion and will continue this medi-

(Continued on next page)

cal assistance as long as is necessary—scientific knowledge may never be employed to imperil health or destroy life.—The privileges and facilities afforded the doctor must never be used for other than professional purposes.—Medical secrecy must be preserved.”

These principles indicate a high standard of ethics. They are not different nor more lofty than those which guide the daily practice of all right thinking American physicians. Whether medical ethics the world over is pitched on so high a plane, we do not know. If our membership and cooperation in the World Medical Association will improve and extend so fine a standard of conduct among physicians at home

and abroad then we should welcome Dr. Bauer's invitation and join hands with him.

The present attainments in medicine are the fruits of world-wide cooperation. Many of the best achievements in public health and preventive medicine were won in Panama and Africa and India. Our modern armamentarium of improved antibiotics came in part from England, Sweden, and Germany. Present day refinements in surgical techniques may have had their impetus in Spain or Japan, Italy or France. We must remember that we are one World Community. Perhaps the time of the World Medical Association is at hand as Dr. Bauer has said.

SAM A. OVERSTREET, M.D.

*Hast thou attempted greatness?
Then go on;
Back-tracking slackens resolution.*

—Robert Herrick

TEACHING AND RESEARCH RESPONSIBILITIES OF HOSPITALS

(Continued from Page 448)

Under the leadership of such citizens as C. Saul Hertzman and Joseph Fleischaker and with the support and guidance of my good friend J. Murray Kinsman, M.D., Dean of the University of Louisville School of Medicine, you will be contributing, not only to the production of more hospital beds, not only to the care of the sick, but to discovery and education as well—to the advancement of knowledge through research and to the education of hospital personnel in several fields, as well as of the physicians with whom they work. Because of your splendid efforts, not only will the sick of today be better provided for, but the sick of tomorrow will command the services of a better hospital team, composed of technicians, nurses, family physicians and specialists.

*Very few men are wise by their own counsel; or
learned by their own teaching.
For he that was only taught by himself, had a fool to
his master.*

—Ben Johnson

MATERNAL MORTALITY IN KENTUCKY

(Continued from Page 400)

number of these deaths can be further reduced by proper preventive or therapeutic methods.

It is interesting to note that states which have succeeded in reducing their maternal mortality rates appreciably are, for the most part, those with actively functioning Maternal Mortality Committees set up for the purpose of investigating the causes and preventability of these deaths. Such a committee has recently been appointed by the Kentucky State Medical Association, and the State Department of Health anticipates a mutually helpful association with the members of this group in working toward the time when the last element of danger can be removed from the act of parturition.

“Your Blood Pressure,” a new American Heart Association leaflet, may be obtained from: Kentucky Heart Association, 401 Speed Building, Louisville. The illustrated leaflet contains basic facts on high blood pressure and urges patients to follow their physician's advice during trial periods of new medicine.



ORGANIZATION SECTION



Annual Meet Specialty Sessions Will be Held Sept. 18

The popular practice of devoting one full afternoon during the KSMA Annual Meeting to the twelve co-operating specialty groups giving scientific programs simultaneously will be continued at the 1957 meeting, KSMA President and Chairman of the Committee on Scientific Assembly and Arrangements, Richard R. Slucher, M.D., has announced.

The Annual Scientific Assembly this year will fall on Tuesday, Wednesday and Thursday, September 17, 18 and 19. The afternoon devoted to specialty group meetings, at which time there will be no general sessions, will be Wednesday, September 18.

"It is most difficult," said the KSMA president, "to develop a scientific program at all the general sessions to interest all of the groups that are limiting their practice. In the specialty group meetings, the programs may be made as technical as desired."

It was also pointed out that any KSMA member is privileged to move from one specialty group meeting to another during the afternoon as his interests might lead him.

Meeting place assignments for the twelve different groups will be announced in the August Journal. As most of the meeting rooms used in 1956 were satisfactory, only those groups needing more room will be changed, Dr. Slucher said.

In addition to the Columbia Auditorium, specialty group meetings will be held in the First Christian Church, the Calvary Episcopal Church and the First Unitarian Church. These buildings are near the Columbia Auditorium and will permit groups attending these meetings to visit the exhibit hall during the afternoon intermission.

Fourth District Will Meet May 23 at Lebanon

KSMA President Richard R. Slucher, M.D., Buechel, will speak to the Fourth Councilor District on Thursday, May 23, at 6:00 p.m., CST, at the Lebanon Country Club at Lebanon. His subject will be "What Kind Are You?"

Scientific papers on "Spinal Chord Tumors," and "Lung Tumors," will be given by Thomas M. Marshall, M.D., and John S. Harter, M.D., both of Louisville, said Keith Crume, M.D., Bardstown, councilor for the district.

The Marion County Medical Society, of which D. D. Drye, M.D., Bradfordsville, is president and John W. Ratliff, Jr., M.D., Lebanon, is secretary, is in charge of the arrangements.

Co. Officers Meet Features Law, Labor, Local News

U. S. Senator Thruston B. Morton, Washington and Louisville, cited proposals "to provide for the many Americans who cannot afford the costs of medical care," in discussing "What the Medical Profession May Expect of the 85th Congress," at a luncheon held by the Seventh Annual County Society Officers



Richard G. Elliott, M.D., Lexington, (right) KSMA Public Information and Service Committee chairman, discusses medical press relations with Ky. Press Assn. head, A. S. Wathen, Jr., Bardstown, and Ralph C. Eades, M.D., Valparaiso, Ind., at the officers conference.

Conference in Lexington on April 14.

Despite travel difficulties encountered by heavy rainfall, 26 county medical societies were enrolled at the day-long conference with a total State registration of 120 officers and guests. Representing the largest organized local group were 32 physicians from metropolitan Jefferson County. The Fayette society registered 17 for the second-largest turnout.

The Eisenhower Administration, Senator Morton said, "has consistently recommended extension and improvement of voluntary health insurance" for the disabled, older people and lower income families, and he added that physicians might expect further support of medical research projects and federal programs "to help ease the critical shortages in health manpower, such as doctors, nurses and other health specialists."

L. W. Larson, M.D., Bismarck, N. D., a member of the Board of Trustees of the AMA, discussed medicine's relationship to the various types of labor-management health plans in effect across the nation. Dr. Larson expressed his pride in coming to Kentucky, "the state that has contributed so much to organized medicine," including, "Doctor Henderson, Doctor Abell, Doctor Rankin and Doctor Bailey."

C. Joseph Stetler, Chicago, director of the AMA

(Continued on Page 455)



On opposite page are photos snapped at the Seventh Annual County Society Officers Conference held at the Phoenix Hotel, Lexington, on April 4.

First Photo:

Senator Thruston B. Morton (left) enjoys a joke with KSMA President Richard R. Slucher, M.D., Buechel, and Hugh Mahaffey, M.D., Richmond, chairman of the KSMA Council.

Second Photo:

Four of the various "presidents" at the Conference were snapped: Robert G. Overstreet, M.D., Louisville, president, UL Chapter, Student AMA; Dr. Slucher; J. Duffy Hancock, M.D., Louisville, president, Ky. Physicians Mutual; A. B. Barrett, M.D., Lexington, president, Fayette County Medical Society.

Third Photo:

Medical matters at the national level were discussed by L. W. Larson, M.D., chairman, executive committee, AMA Board of Trustees; Clark Bailey, M.D., Harlan, AMA delegate from Kentucky; C. Joseph Stetler, Chicago, director AMA Law Dept; W. Vinson Pierce, M.D., Covington, KSMA delegate to the AMA.

Fourth Photo:

Participants in the Blue Shield Seminar, held during the afternoon of the Officers Conference, review their plans before giving their program: Oscar O. Miller, M.D., Louisville, co-founder of the Blue Shield program; D. Lane Lynes, executive director, and Don Giffen, assistant executive director of the Blue Shield; Dr. Hancock, program moderator.

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Law Department, said that much legislation, unfavorable to the private practice of medicine, had been passed because doctors "have not become sufficiently active in civic and legislative affairs. The medical profession generally "considers the present administration a friendly one," he declared.

Responsibilities and obligations of the physician and the publisher were frankly discussed by the president of the Kentucky Press Association, A. S. Wathen, Jr., editor of the Kentucky Standard, Bardstown, under the subject "The Press and Local Medical News." "Keep in mind," he pointed out, "the principles of your medical ethics which read: 'Refusal to release the material may be considered a refusal to perform a public service.' "

Other conference speakers included Ralph C. Eades, M.D., Valparaiso, Ind., a pioneer in the promotion of science fairs in secondary schools through financial support from organized medical groups, and Oscar O. Miller, M.D., D. Lane Tynes and Don Giffen, all of Louisville, who reviewed benefits of the Kentucky Blue Shield Plan. The Plan's historical background was given and an operational report, which showed that the Blue Shield had paid Kentucky doctors \$11 million in the past eight years and estimated that the 1957 payments will run \$4½ million

Subsequent issues of *The Journal* will no doubt carry some of the papers presented at the Conference.

Gov. Promises Voice at UK, Scholarship Fund to KSDA

Governor Chandler assured Kentucky's dental profession, during the 97th State Dental Association Convention held recently in Louisville, of:

1. A voice in the administration of the future University of Kentucky Medical School, and possibly a place on the UK board of trustees.

2. State assistance in setting up a rural-dental-scholarship program to provide dentists for rural areas.

Proposed State legislation has been drawn for the dental-scholarship program. It will be similar to the Rural Kentucky Medical Scholarship Fund. Dr. Lyman Wagers, Lexington, said, however, that the dental scholarships would be financed by the State, whereas the medical scholarships are provided from both State and private funds.

Dr. F. W. Jordan, Louisville, was elected president-elect of the KSDA. Dr. J. J. Kelly, Franklin was installed as president. Others elected were: first vice-president, Dr. E. R. Dinwiddie, Scottsville; second vice-president, Dr. C. D. Draper, Madisonville; third vice-president, Dr. Lyman Wagers, Lexington. Dr. A. B. Coxwell, Louisville, was named secretary-treasurer for the fifth time.

AHA Essay Briefs Due June 15

Abstracts of papers, for presentation at the American Heart Association's Scientific Sessions on October 25-28 in Chicago, must be submitted by June 15, according to Thomas G. Hobbs, M.D., Ky. Association president.

Papers must be based on original investigations in the cardio-vascular field. They must be submitted in triplicate on forms obtainable from the Medical Director of the Association, 44 East 23rd St., New York 10, N. Y. They should not exceed 300 words and should contain a summary of results obtained and conclusions reached, Dr. Hobbs said.

Mt. Sterling Hears Dr. Fishbein

Morris Fishbein, M.D., Chicago, internationally-known writer and lecturer on health problems, was keynote speaker at a community dinner at Mt. Sterling on April 5. The dinner was held to acquaint local residents with problems and plans for the Mary Chiles Hospital. Former editor of *The Journal of the AMA*, Dr. Fishbein has authored 33 books.

WA Fetes Doctor's Day

"Doctor's Day," was celebrated by local organizations of the Woman's Auxiliary in various sections of the State last month in recognition of the "high skill and professional achievement made by doctors to the nation's health and well-being." The red carnation was selected as a symbol of the observance.

KSMA Head, UK's Dean Willard to Speak in 7th District

The annual meeting of the Seventh Councilor District will feature an afternoon and evening session. It will be held at the Frankfort Country Club on Thursday, May 29, starting at 4 p.m., Central Daylight Saving Time.

According to B. B. Baughman, M.D., councilor for the Seventh District, a scientific program will be given at the afternoon session by members of the Seventh District.

Following the dinner, KSMA President Richard R. Slucher, M.D., and William R. Willard, M.D., vice president of the University of Kentucky Medical Center, will address the group.

Ky. MDs are Urged to Make AMA Reservations Now

KSMA members who plan to attend the 106th Annual Meeting of the American Medical Association in New York City, June 3-7, and have not already made reservations are urged to do so at once, advises Richard R. Slucher, M.D., KSMA president.

One of the meeting's most impressive ceremonies, Dr. Slucher points out, will be the administering of the presidential oath to David B. Allman, M.D., Atlantic City, on June 4 at 8:30 p.m. in the Waldorf-Astoria's grand ballroom. Dr. Allman appeared on the KSMA County Society Officers Conference program in 1956.

Clark Bailey, M.D., Harlan, and W. Vinson Pierce, M.D., Covington, will be the KSMA representatives to the meeting of the AMA House of Delegates during the annual session.

Nominating Committee Organizes at Officers Conference

The committee to nominate general officers for the 1957-58 year and report to the House of Delegates in September at the Annual Meeting, held its first meeting at the County Society Officers Conference in Lexington on April 4. Coleman C. Johnston, M.D., Lexington, was elected chairman.

Doctor Johnston has asked The Journal to state that his committee has received two nominations for president-elect. They are R. W. Robinson, M.D., Paducah, and W. L. O'Nan, M.D., Henderson. Doctor Johnston said his committee would welcome other suggestions from members for this and other associational offices to be selected.

Other members of the nominating committee are: V. G. Kinnaird, M.D., Lancaster, John S. Llewellyn, M.D., Louisville, A. O. Miller, M.D., Louisville and Carlisle Morse, M.D., Louisville.

KAGP Honors Drs. Tanner, Allen; Names Dr. Bryant Pres.-Elect

J. Leland Tanner, M.D., Henderson, was chosen "Family Doctor of the Year" during the annual meeting of the Kentucky Academy of General Practice, held in Louisville last month.

Chief of the department of obstetrics at Henderson's Methodist Hospital, Dr. Tanner was KSMA vice president in 1950. He has served two terms as president of the Henderson County Medical Society.

George S. Allen, M.D., Louisville, was the recipient of a KAGP award for research on cervicitis, conducted in cooperation with Malcolm Barnes, M.D., Louisville, director of laboratories at Norton Infirmary.

Charles G. Bryant, M.D., Louisville, was named president-elect. W. E. Becknell, M.D., Manchester, was installed as KAGP president. Other officers chosen include George P. Archer, M.D., Prestonsburg, vice-president; John J. Rolf, M.D., Covington, secretary-treasurer; Carroll Witten, M.D., Louisville, delegate to the American Academy of General Practice.

12th, 15th Districts Join in June 27 Meeting

The annual afternoon and dinner meeting of the joint Twelfth and Fifteenth Councilor Districts will be held Thursday, June 27, at DuPont Lodge, Cumberland Falls.

An announcement made jointly by Garnett J. Sweeney, M.D., Liberty, councilor for the Twelfth District, and Charles B. Stacy, M.D., councilor for the Fifteenth District, said the meeting would get under way about 3 o'clock, with a strong scientific program which will soon be completed and announced in the June issue of The Journal.

Featured at the afternoon dinner session will be talks by KSMA President Richard R. Slucher, M.D., and Dean William R. Willard, M.D., vice president of the University of Kentucky Medical Center.

KSMA President Speaks at 14th Dist. Meeting

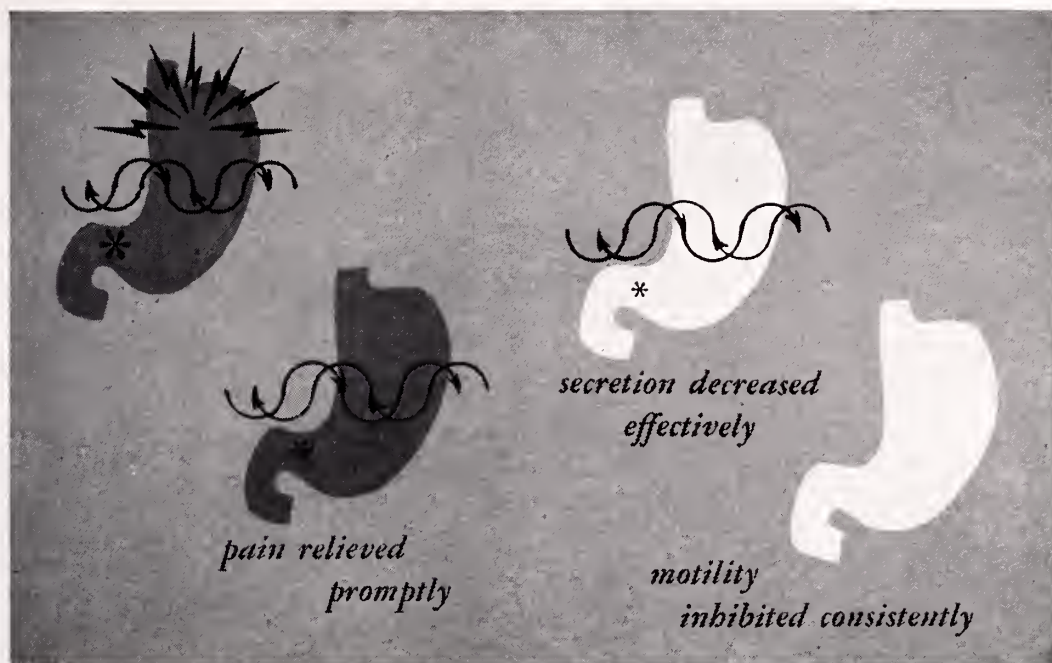
KSMA President Richard R. Slucher, M.D., addressed physicians at the Fourteenth Councilor District at a meeting held at Pikeville on April 10.

About 50 physicians and their wives attended the dinner meeting at the Greenmeadow Country Club, according to Charles C. Rutledge, M.D., district councilor. The Pike County Medical Society, with Ballard W. Cassady, M.D., president, served as host.

Three essayists from the faculty of the University of Louisville School of Medicine presented scientific papers, including William C. Adams, M.D., Beverly T. Towery, M.D., and Rudolf J. Noer, M.D.

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incidence of side effects was minimal. . . ."

The therapeutic utility and effectiveness of Pro-Banthine in the treatment of peptic ulcer are repeatedly confirmed in the medical literature. Dosage: One tablet with each meal and two tablets at bedtime. G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

*Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: Pro-Banthine in the Treatment of Peptic Ulcer. A Clinical Evaluation with Gastric Secretory, Motility and Gastroscopic Studies. Report of 60 cases, Am. J. M. Sc. 232:156 (Aug.) 1956.

SEARLE



Prominent presidents participating in the Senior Day program were: KSMA President Richard R. Slucher, M.D., Buechel, John S. Harter, M.D., president, Jefferson County Medical Society; Dan Burke, Louisville, president, 1957 Class UL Medical School; Robert G. Overstreet, Louisville, president, UL Chapter, Student AMA.

Senior Day Program Held April 15

The Third Annual Senior Day Program, sponsored by the KSMA in cooperation with the University of Louisville and the Jefferson County Medical Society, was held April 15 in Louisville.

The Rankin Amphitheater at General Hospital was the scene of the morning program. The afternoon and evening sessions were at the Kentucky Hotel. Each senior was an individual guest of a volunteer host of the Jefferson County Medical Society at the dinner.

The Woman's Auxiliary to the KSMA entertained the wives and sweethearts of the members of the 1957 graduating class while they were attending the meetings. Mrs. Carlisle Morse, Louisville, served as chairman of the Auxiliary's committee on arrangements.

KSMA President Richard R. Slucher expressed the Association's appreciation to the Jefferson County Medical Society, the University of Louisville and the Woman's Auxiliary, and stated that the fine contributions of these groups insured the success of the program.

Guest speaker at the dinner hour was Walter Porteus, M.D., immediate past president of the Indiana State Medical Association, who discussed "New Doctor-Old Doctor Professional Relations." Doctor Porteus urged would-be physicians to use tolerance and sympathetic understanding in treating patients, and recommended the wisdom of counselling with older physicians.

"We have learned the hard way," he said, "and



Senior Day Committee Chairman Richard G. Elliott, M.D., Lexington, poses with the featured speaker, Walter Porteus, M.D., immediate past president, Indiana State Medical Association.

will be glad to pass on the benefit of our experience to you." He insisted that postgraduate education should be compulsory for medical practice but, he



Cooperation of the Women's Auxiliary in entertaining the wives and sweethearts of 1957 graduates of the Senior Day program was most effective. Pictured are: Mrs. Charles Stacy, Pineville, state president; Mrs. Carlisle Morse, Louisville, chairman, Committee on Arrangements; Mrs. Marvin Lucas, president, WA to Jefferson County Medical Society, and Mrs. J. Andrew Bowen, president-elect, Jefferson County Medical Society Auxiliary.

continued, "I know of no text that will cover all the decisions you must make. Experience becomes the greatest factor."

Other program speakers included President Slucher, Oscar Hayes, M.D., Louisville; Carl Fortune, M.D., Lexington; Delmas Clardy, M.D., Hopkinsville; Julian Cole, M.D., Henderson; Russell E. Teague, M.D., Louisville; Carl Cooper, Jr., M.D., Bedford; W. Vinson Pierce, M.D., Covington; Homer Martin, M.D., Louisville;

Wendell Lyons M.D., Ashland; Thomas Gilbert, M.D., Bowling Green; Branham Baughman, M.D., Frankfort; and Douglas Scott, M.D., Lexington. Richard G. Elliott, M.D., Lexington, chairman of the Senior Day committee, presided at the afternoon session and John S. Harter, M.D., Louisville, president of the Jefferson County Medical Society presided at the evening program. Wyatt Norvell, M.D., New Castle, spoke at a meeting of the wives and sweethearts.

Proposed Principles of Medical Ethics to be Read at AMA Meet

All KSMA members, whether attending the AMA Convention in New York, June 3-7, in person or through the media of the press, are expected to watch closely the action taken by the AMA House of Delegates on the Proposed Principles of Medical Ethics that the Council on Constitution and Bylaws will present to the House.

The preamble points out that these principles are not laws but "standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public." The proposed principles follow:

(1) The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

(2) Physicians should strive continually to improve

medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

(3) A physician should practice a method of healing founded on a scientific basis; and he should not voluntarily associate professionally with anyone who violates this principle.

(4) The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

(5) A physician may choose when he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

(6) A physician should not dispose of his services under terms or conditions which (a) interfere with or impair the free and complete exercise of his independent medical judgment and skill, (b) cause deterioration of the quality of medical care, (c) or permit the exploitation of his services for financial profit.

(7) In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies, or appliances may be dispensed or supplied by the physician provided there is no exploitation of the patient.

(8) A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

(9) A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

(10) A physician's responsibilities extend not only to his patients but also to those activities whose purpose is to improve the health and welfare of the individual and of the community.

Note to KSMA Golfers

The American Medical Golfing Association will hold its Forty-First Tournament, which is staged in connection with the annual meeting of the AMA, at the Westchester Country Club, Rye, New York, on June 3, 1957. Prizes will be awarded on eighteen-hole competition.

Tournament play, starting at 8:30 a.m., will allow players to tee-off up to 2:00 p.m. Luncheon, banquet and green fees are included in the registration which is open to all male members of the AMA. For registration cards and further information, write Bob Elwell, 3101 Collingwood Blvd., Toledo 10, Ohio.

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1. This Knox booklet is based on nutritionally-tested Food Exchanges¹ and demonstrates that variety is possible for diabetic diets.

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1. The Food Exchange Lists referred to are based on material in "Meal Planning with Exchange Lists" prepared by Committees of the American Diabetes Association, Inc., and The American Dietetic Association in cooperation with the Chronic Disease Program, Public Health Service, Department of Health, Education and Welfare.

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patients



Like oil on troubled waters...

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alkaloids in optimal ratio, with phenobarbital



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"We prefer to use alseroxylon (Rauwiloid)

since it is less likely to produce excessive fatigue and weakness than does reserpine."¹ Up to 80% of patients with mild labile hypertension and many with more severe forms are controlled with Rauwiloid alone.

1. Moyer, J.H.: J. Louisiana M. Soc.
108:231 (July) 1956.

A Better Tranquilizer, too

"...relief from anxiety resulted in generally increased intellectual and psychomotor efficiency with a few exceptions."² Rauwiloid is outstanding for its *nonsoporific* sedative action in a long list of unrelated diseases not necessarily associated with hypertension but burdened by psychic overlay.

2. Wright, W.T., Jr., et al.: J. Kansas M. Soc.
57:410 (July) 1956.

Dosage: Merely two 2 mg. tablets at bedtime.
After full effect one tablet suffices.

Best first step when more potent drugs are needed

Rauwiloid is recognized as basal medication in all grades and types of hypertension. In combination with more potent agents it proves synergistic or potentiating, making smaller dosage effective and freer from side actions.

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In moderate to severe hypertension this single-tablet combination permits long-term therapy with dependably stable response. Each tablet contains 1 mg. Rauwiloid (alseroxylon) and 3 mg. Veriloid (alkavervir). Initial dose, 1 tablet t.i.d., p.c.

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Riker LOS ANGELES

13th Dist., TB Hospital No. 4 Combine Meet at Ashland

Richard R. Slucher, M.D., KSMA president, spoke to a joint meeting of the Thirteenth Councilor District and District 4 State TB Hospital at Ashland April 11.

Charles B. Johnson, M.D., district councilor, states that about 70 physicians and their wives were in attendance. Duanne Jones, M.D., hospital director, was unable to be present due to the death of his father.

Essays were presented by M. L. White, Jr., M.D., Huntington, W. Va., Roland Burns, M.D., Huntington, Beverly T. Towery, M.D., Rudolf Noer, M.D., Louisville, and J. P. A. Latour, M.D., Montreal, Canada.

William R. Willard, M.D., dean of the University of Kentucky Medical School, also spoke. The Boyd County Medical Society, headed by President Philip J. Winn, M.D., was host to the visiting societies of the district.

Four-Story Addition Will Be Built to General Hospital

Work is getting under way on a four-story addition to General Hospital in Louisville. The construction is expected to take two years.

The Federal Government is providing \$1,000,000 under the Hill-Burton plan, to be spent on the addition. A \$300,000 bond issue voted by the people of Louisville in 1952 will furnish the rest of the funds.

The addition will include new surgery, obstetrics, laboratory and X-Ray facilities. It is being built at the rear of the hospital.

Ky. MDs Speak at ICS Meet

Oscar O. Miller, M.D., Louisville, discussed "Our Changing Times," at a banquet held during a sectional meeting of the International College of Surgeons at French Lick, Ind., April 8-10. J. Andrew Bowen, M.D., Louisville urologist and regent for Kentucky of the U.S. section of the college, was general chairman of the meeting.

The scientific program of the two-day meeting also included presentations by John J. Robbins, M.D., J. Thomas Giannini, M.D., Gordon L. Smiley, M.D., J. Ray Bryant, M.D., Hastel L. Townsend, M.D., J. Herman Mahaffey, M.D., H. Lester Reed, M.D., John R. Smith, M.D., L. Douglas Atherton, M.D., John D. Allen, M.D., William O. Johnson, M.D., and Avrom M. Isacacs, M.D., all of Louisville.

Dr. Witten Heads AAGP Committee

Carroll L. Witten, M.D., Louisville, editor of the Journal of the Kentucky Academy of General Practice, has been elected chairman of the Conference of All State Chapter Publications of the American Academy of General Practice.

Editor of the KAGP Journal since its first issue in September 1954, Dr. Witten was unanimously chosen for the new honor by representatives of medical publications in 48 states at a recent meeting in St. Louis. He is also editor of The Bulletin of the Jefferson County Medical Society.

IC Hospital May be Sold

A move to sell the 73-year-old Illinois Central Railroad hospital at Paducah is under way, according to a published report of the Paducah Sun-Democrat, following the ordering of an immediate inventory of the hospital by J. V. Vaniro, business manager.

Railroad employees from a wide area use the hospital, paying monthly hospitalization fees then using the facilities free if so needed, the paper stated. It added that the closing report "caused deep concern among the IC employees."

Ky. Blue Shield Executives Go to California Conference

Six KSMA members attended the annual conference of Blue Shield Plans on March 24-28 at the Fairmont Hotel, San Francisco, as members of the board of directors of the Kentucky Physicians Mutual, Kentucky's Blue Shield Plan.

Included were J. Duffy Hancock, M.D., Louisville, president of the board of directors, Branham B. Baughman, M.D., Frankfort, treasurer, Joseph C. Bell, M.D., Louisville, John Dickinson, M.D., Glasgow, J. Vernon Pace, M.D., Paducah, and R. W. Robertson, M.D., Paducah.

Others attending were D. Lane Tynes, Louisville, executive director of the local Blue Shield Plan, Louis B. Rodenberg, Frankfort, director, and J. P. Sanford, Louisville, secretary to the board.

Approximately 1,000 persons were in attendance at this session, which met jointly with the national conference of Blue Cross Plans. The 1958 conference will be held in Chicago.

Danville Hospital Will Hold Open House May 12

On Sunday, May 12, the first day of National Hospital Week, the Kentucky State Mental Hospital at Danville will hold open house from 1-4 p.m., according to an announcement from the Kentucky Department of Public Relations. A tour will be conducted through the hospital, which is superintended by Leslie Wright, M.D., Danville.

More than 7,000 Kentuckians were treated last year in the State's four mental hospitals, Harold L. McPheeters, M.D., director of the Department of Mental Health reports, while 5.6 per cent fewer patients were hospitalized than in the previous year.

At the same time 670 patients, ranging in age from 10 to 70 plus, were treated at the State's 11 mental health clinics.

The reduction in hospitalized cases was achieved despite an increase in admissions, the report stated, due to the progress in treatment of mental illness in Kentucky. This included the availability of psychiatrists, psychologists, general physicians, nurses and social workers, and the use of the new tranquilizing drugs and electro-shock treatments.

Professional Nursing School Enrollees Decline in '56

The number of new students entering professional nursing schools in 1956 totaled 45,839, a decline of 659 from the previous year. The 15,500 admissions to practical nursing training programs remained consistent with the previous year's enrollment.

This report from the National League for Nursing in New York also shows that graduates of the same training period totaled 29,591 from the professional schools. The practical nursing programs prepared about 10,500.

The League is conducting a study of the professional school admissions. Nursing schools, state and local groups concerned with recruiting students have been advised to review their admission policies, education programs and scholarship aids, states John H. Hayes, chairman of the League's Committee on Careers.

The report revealed that in only one type of basic nursing education—the college or university program offering a baccalaureate degree—admissions exceeded that of the previous year.

Muldraugh Hill Society Meets at Elizabethtown Hospital

The Muldraugh Hill Medical Society held a day-long meeting at the Hardin Memorial Hospital, Elizabethtown, on April 11, according to Joseph C. Ray, M.D., society secretary. Luncheon was served at the hospital.

Scientific presentations included, "The Management of Urinary Tract Infections in Infants and Children," by Lt. Col. Samuel Rodriguez, M.C., Fort Knox; "Family Care of the Service Men," Robert O. Joplin, M.D., Louisville; "Surgical Conditions of the Esophagus," Burford Davis, M.D., Louisville.

"The Value of Abdominal Paracentesis as an Aid in the Evaluation of the Acute Abdomen," C. B. Clegg, M.D., Elizabethtown; "The Frequent Ear Diseases," Capt. William F. Shipman, M.C., Fort Knox; "Early Diagnosis of Carcinoma of the Cervix," Melvin Bernhard, M.D., Louisville; and "Acute Rheumatic Fever," Lt. Col. Enrico D. Carrasco, M.D., Fort Knox.

Carroll Witten, M.D., Louisville, discussed "Pending Legislation Affecting the Medical Profession," and Harry Lehman, executive secretary of the Jefferson County Medical Society, advised the group "What the County Medical Society Can Do for the Physician."

Draft Extension Asked

The Defense Department has asked Congress for new authority to continue the present Doctors Draft Act which is due to expire July 1. The proposed legislation would limit Selective Service calls for physicians to those under 35 who have been deferred from military duty to finish their professional education. The present \$100 bonus to physicians and dentists called would be continued.

STUDENT AMA

The Student AMA election of officers for the year 1957-58 has taken place.

The president is Clarke Anderson, a Louisvillian who has done particularly well scholastically in three years and who attended the 1957 SAMA convention as delegate.

The president-elect is Neville Caudill, a Louisvillian who has distinguished himself in extracurricular activities at the University of Louisville Arts and Sciences and Medical Schools and who is the retiring president of the University Student Senate. He was alternate delegate to the 1957 SAMA convention. The secretary-treasurer is John Baughman, a sophomore from Stanford, Kentucky, who also attended the convention. We are proud of these officers and feel that each is a distinct asset to the chapter.

The U. of L. Chapter of SAMA is deeply indebted to the Kentucky State Medical Association for sponsoring our four delegates to the Seventh Annual SAMA Convention in Philadelphia this year. Let me give you an idea of the opportunities you have made available to them. Besides the meetings of the standing committees and their discussion of issues pertinent to all medical students, these highlights were also enjoyed.

One afternoon the Wyeth Laboratories conducted tours of their plants near Philadelphia.

C. P. Rhoads M.D., cancer expert of the Sloan-Kettering Institute in New York delivered one of his recent research papers. This was augmented by four student research papers.

A member of the President's Cabinet, Secretary Marion B. Folsom of the Department of Health, Education, and Welfare delivered the third W. W. Root Memorial Lecture, inaugurated by Alpha Omega Alpha, at the annual banquet.

The Abbott Company had a dance party for 2000 guests with an hour of entertainment by top Philadelphia and New York talent.

The A. M. A. had a reception for the new SAMA Officers following the election.

There were many, many technical exhibits.

The three Grand Awards, given on the basis of chance, were a week's trip for two to Bermuda, Nassau, and Mexico.

The wives of delegates had a separate program of five interesting gatherings.

And to top off the whole meeting, a panel discussion entitled "General Practice-Specialty Trends in Practice" was held. The moderator was Elmer Hess, M.D. and the panel included Kenneth Babcock M. D., J. S. DeTar M.D., I. S. Ravdin M.D., and Edward Turner M.D. Each of these men is particularly well known and qualified in his field.

Indeed, we are grateful to the KSMA for their generosity to Kentucky medical students.

ROBERT G. OVERSTREET, President
U of L Chapter, Student AMA

49 Kentucky Hospitals Shown on Accredited List

The Joint Commission on Accreditation of Hospitals has published a list of the hospitals accredited as of December 31, 1956. According to Kenneth B. Babcock, M.D., director of the Commission, this is the fourth list published by it. In addition, he states:

"The omission of a hospital from this list does not necessarily mean that the hospital fails to meet the Standards of the Joint Commission. It has not been possible in the three years the Commission has been in existence to visit all hospitals and act on all requests for accreditation.

"Any inquiries about this listing or hospital accreditation should be directed to the office of the Joint Commission on Accreditation of Hospitals at 660 North Rush Street, Chicago 11, Illinois."

Kentucky's list is as follows:

ASHLAND

District Four State Tuberculosis Hospital
King's Daughters' Hospital
Our Lady of Bellefonte Hospital

BEREA

Berea College Hospital

BOWLING GREEN

Bowling Green-Warren County Hospital

COVINGTON

Saint Elizabeth Hospital
Wm. Booth Memorial Hospital

DANVILLE

Ephraim McDowell Memorial Hospital

DAYTON

Speers Memorial Hospital

ELIZABETHTOWN

Hardin Memorial Hospital

FORT THOMAS

St. Luke Hospital of Campbell County

FRANKFORT

King's Daughters' Hospital

GLASGOW

District Six State Tuberculosis Hospital
T. J. Samson Community Hospital

HENDERSON

Methodist Hospital in Henderson

HOPKINSVILLE

Jennie Stuart Memorial Hospital

LEXINGTON

Central Baptist Hospital
Good Samaritan Hospital
St. Joseph Hospital
Shriners Hospital for Crippled Children

LONDON

District Five Tuberculosis Hospital
Marymount Hospital

LOUISVILLE

Children's Hospital
District Two State Tuberculosis Hospital
Jewish Hospital
Kentucky Baptist Hospital
Kosair Crippled Children Hospital

Louisville General Hospital
Norton Memorial Infirmary
St. Anthony Hospital
St. Joseph Infirmary
SS. Mary and Elizabeth Hospital

LYNCH

Notre Dame Hospital

MADISONVILLE

District One State Tuberculosis Hospital
Hopkins County Hospital

MAYSVILLE

Hayswood Hospital

MURRAY

Murray Hospital Association

OWENSBORO

Our Lady of Mercy Hospital
Owensboro-Daviess County Hospital

PADUCAH

Western Baptist Hospital

PAINTSVILLE

Paintsville Clinic

Paintsville Hospital

PARIS

Bourbon County Hospital

District Three State Tuberculosis Hospital

PIKEVILLE

Methodist Hospital of Kentucky

PINEVILLE

Pineville Community Hospital Association

PRESTONSBURG

Prestonsburg General Hospital

SCOTTSVILLE

Allen County War Memorial Hospital

WAVERLY HILLS

Waverly Hills Tuberculosis Sanatorium

Inspection is made of hospitals with 25 beds or more. No inspection is made unless it is requested, the Commission report pointed out. Some eligible hospitals have not yet been visited in the Commission's four-year existence, it was explained.

National Groups Unite to Promote Pension Plans

The Jenkins-Keogh proposal, long supported by the AMA, for establishment of voluntary pension plans for the self-employed, is being promoted by a new organization known as "American Thrift Assembly for Ten Million Self-Employed," according to the Washington AMA news office.

Charter members of the group are the AMA, American Bar Association, American Institute of Accountants, American Retail Federation, National Association of Real Estate Boards, American Dental Association, and National Association of Retail Drug-gists. Its headquarters are in Washington, at 1025 Connecticut Avenue.

The objective is legislation to authorize deferment of income tax on a portion of income if put into a retirement or annuity program, with tax to be paid as the money is received back in the form of retirement benefits. Currently, corporations need not pay taxes on employee-retirement plans but the self-employed are denied this advantage.

Announcing a unique new rauwolfia derivative...

First report on one of the
most encouraging advances
in psychopharmacology
since the introduction
of rauwolfia:
a tranquilizing-
antihypertensive agent
which combines the potency
of the rauwolfias with
significantly fewer and
milder side effects.

In mid-1955, Abbott Laboratories released for clinical trial a new alkaloid of *Rauwolfia canescens*. This new alkaloid, named Harmony, received special attention because of its high potency and low toxicity it exhibited in extensive pharmacological testing.

Since that time, Harmony has been tried in conditions ranging from mild anxiety to major mental illnesses and in hypertension. Every characteristic of the drug was studied . . . evaluated . . . compared. And from the reports, one fact stands out:

- In more than two years of clinical evaluation, Harmony exhibited significantly fewer and milder side effects in comparative studies with reserpine. This, while demonstrating effectiveness comparable to the most potent forms of rauwolfia.
- Most significant: Harmony causes less mental and physical depression. *And there are very few reports of the lethargy seen with many other rauwolfia preparations.*

This is not to suggest, of course, that side effects will not occur with Harmony—as with any potent therapeutic agent. But the mildness of side effects, in the few instances in which they have been reported, suggests Harmony as a drug of choice in conditions ranging from mild anxiety to major mental illness and in essential hypertension.

Why fewer and less severe side effects?

Some investigators suggest that the evidence of less parasympathetic effect with Harmony in animals might also be true in man. In chronic toxicity studies with Harmony this was manifested by less diarrhea, “bloody tears” and ptosis in rats than was observed with the same dosage of reserpine. Dogs also exhibited milder side effects—in particular, diarrhea. No oral toxicity or hematological change was observed with Harmony over a wide dosage range.

Harmony as a tranquilizer

While Harmony's safety is most impressive, clinical investigators reported other notable characteristics for this wide-range

Harmonyl*

(Deserpidine, Abbott)

quilizer. For instance, following an eight-month study of
tic, hospitalized mental patients, Ferguson¹ reported:

Harmonyl benefited at least 15% more overactive patients
oral reserpine.

Harmonyl was more potent in controlling aggression,
requiring only one-half to two-thirds the dosage of reserpine.

number of patients experiencing side reactions on
reserpine were completely relieved when changed to Harmonyl.

In summary Ferguson concluded: "*The most notable im-
provements were the absence of side effects and relatively rapid
onset of action with Harmonyl.*"

Harmonyl in hypertension

Hypertension studies show that the average reduction in blood
pressure obtained with Harmonyl compares closely to that ob-
tained with reserpine. The tranquilizing effect of the two drugs
appeared similar, except that few cases of giddiness,
dizziness, sense of detached existence or disturbed sleep were
observed with patients receiving Harmonyl.

Dosages In mild anxiety, as little as 0.1 mg. of Harmonyl a
day may be effective. In institutionalized psychiatric patients,
less than 2 to 3 mg. a day is likely to be beneficial.

Essential hypertension treatment may be started with
0.25-mg. tablet three or four times a day. After about ten
days (or sooner, depending upon response), dosage may be re-
duced. A maintenance dose of 0.25 mg. daily is often sufficient.

Precautions As with other forms of rauwolfia, Harmonyl
should be used cautiously in peptic ulcer and epilepsy and in
patients about to undergo surgery or electroshock treatment.
Despite infrequent reports involving depression, patients with
history of depressive episodes should be watched carefully.

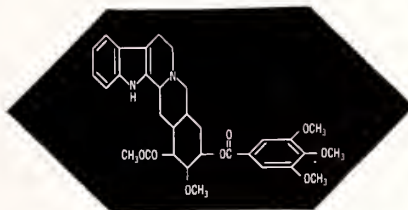
Professional literature is available upon request.

Supplied: Harmonyl is supplied in
0.25-mg. and 1-mg. tablets.

Abbott

Reference: 1; Ferguson, J. T.: Comparison of Reserpine and Harmonyl in Psychiatric Patients:
A Preliminary Report, *Journal Lancet*, 76:389, December, 1956.

*Trademark



Briefs From the U. of L. Medical School

The University of Louisville School of Medicine recently accepted a \$400,000 grant from the Ford Foundation. The Foundation made an initial grant of \$500,000 to the school last September. These grants are a part of the far-reaching Foundation program to strengthen college-faculty instruction in private medical schools throughout the United States.

The grants are to be held as invested endowment for at least ten years. The school may use only the income from the investment during this time. The school is free, after the ten years, to use the principal as well as the investment income.

Rex O. McMorris, M.D., chairman of the Department of Physical Medicine and Rehabilitation, and medical director of Rehabilitation Center, Inc., has been appointed as a permanent faculty member of the Institute for Rehabilitation Center Planning, under the auspices of the office of vocational rehabilitation and the conference on rehabilitation centers.

J. Murray Kinsman, M.D., U of L Medical School dean, has announced that all sophomores will be required to take Part I of the National Board exams this summer before they can enter the junior class next September. "In this way," says the dean, "we will be able to get a line on our teaching program in comparison with other schools." Of the 3,477 students in the U. S. who took the National Board last fall, Alan Bornstein of the U of L made the highest grade.

Louisville Girl Wins First Place in AAPS Contest

June Carol Schweri, a senior at duPont Manual High School in Louisville, won first place for her essay "The Advantages of Private Medical Care," in the Kentucky State contest sponsored by the American Association of Physicians and Surgeons through its Freedom Foundation. Second and third place winners were Dianne Ludlow, also of Manual, and Farnsworth Bryant of Male High School, Louisville.

Through the efforts of John Bate, M.D., Louisville, who has been active in promoting the AAPS program, the contest was well publicized in medical circles and the need for encouragement of the thinking of young people in medical interests was brought to the attention of many physicians.

Mrs. Dorothy Horine Webb, also of Louisville, worked as Dr. Bate's representative in contacting various schools, medical societies and auxiliaries, and woman's clubs throughout the State to urge high school students to enter the contest.

The winning essay, which points out some of the advances medicine has made in the last 43 years and the dangers of socialized medicine, was heard on the radio program "Your Home Show," on April 8.

C. Howard Eller, M.D., professor and chairman of the Department of Community Health, served recently as a consultant to two eastern city projects: (1) a public health survey of the Morningside Heights area of New York City and (2) a survey of the overall public health setup in Philadelphia. In the first project, William R. Willard, M.D., University of Kentucky School of Medicine dean, served as a co-consultant.

According to the News-Letter of the Medical School, the following appointments and promotions have been approved by the Board of Trustees:

Malcolm M. Stanley, M.D., professor of Experimental Medicine, effective June 1; Samuel H. Cheng, M.D., instructor, effective July 1; William Potter Peak, M.D., instructor; Mervel Hanes, M.D., instructor on Obstetrics and Gynecology; Agamenon Despopoulos, M.D., research asst. professor of Pharmacology;

Chester B. Theiss, Jr., M.D., instructor in Anesthesiology; Edward Warrick, Jr., M.D., instructor in Surgery; John R. Fraser, lecturer in Social Science; Werner T. Koella, M.D., lecturer in Physiology; Ping-hui Victor Liu, M.D., instructor in Microbiology; Thomas M. Stevenson, M.D., to asst. professor of Medicine; Alfred O. Miller, M.D., to asst. professor of Radiology;

Maurice M. Best, M.D., to associate professor of Medicine; Charles H. Duncan, M.D., to asso. professor of Medicine; Meyer M. Harrison, M.D., to asso. professor of Medicine; Arthur M. Schoen, M.D., to asso. professor of Medicine; Oscar Shadle, M.D., to asso. professor of Physiology.

Ky. MDs Appear on Program of S.E. Surgical Congress

Approximately 60 Kentucky surgeons attended the meeting of the Southeastern Surgical Congress held April 4 at St. Petersburg, Fla., according to Clyde C. Sparks, M.D., Ashland, councilor for the Congress from Kentucky.

Four Kentucky surgeons took part in the program, including KSMA President-elect Edward B. Mersch, M.D., Covington, Delmas Clardy, M.D., Hopkinsville, Hugh Lynn, M.D., assistant professor of surgery at the University of Louisville Medical School, and Henry Collier, M.D., U of L instructor in surgery.

Howard R. Mahorner, M.D., New Orleans, was inducted as president of the Congress and Murray M. Copeland, M.D., Washington, D.C., was named president-elect. The meeting registered more than 800 surgeons from over the United States. The 1958 session will be held at Baltimore.

Dr. Brodsky Gets 3rd Grant

A \$7,000 research grant has been made to William A. Brodsky, M.D., associate professor of pediatrics at the University of Louisville Medical School by the American Heart Association. This is the third grant awarded to Dr. Brodsky since 1955 by the AHA for research concerning action of the kidneys in removing certain elements from the blood.

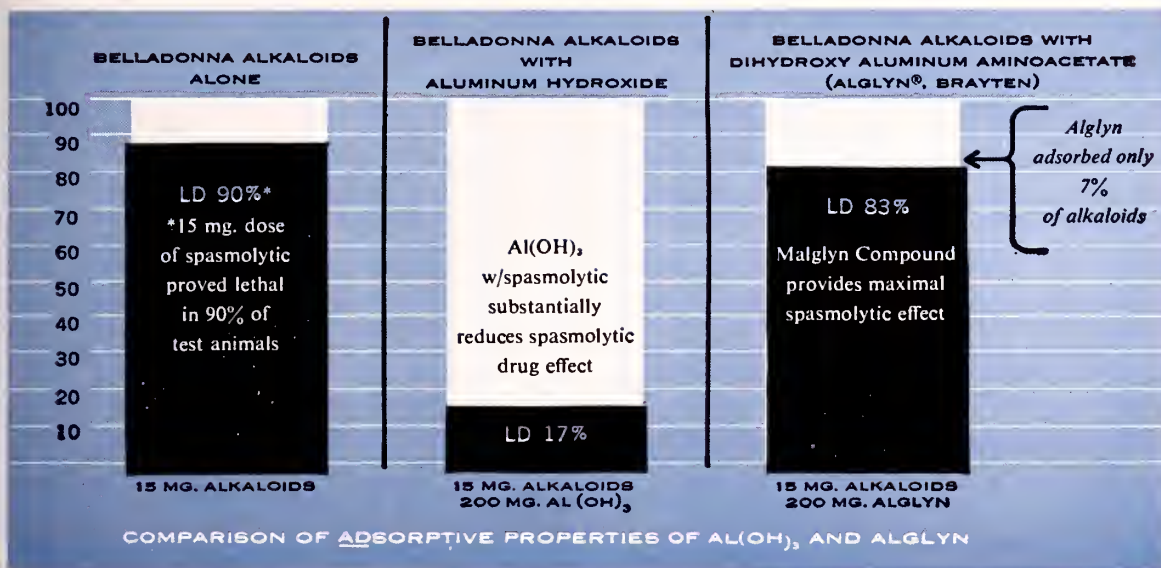
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belladonna alkaloids (as sulfates)	0.162 MG.
phenobarbital	16.2 MG.

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LACMA Writes Health Column for US Alien Weeklies

The Public Relations Department of the Los Angeles County Medical Association has established, for the first time anywhere, a weekly health column in two leading U. S. foreign language newspapers, the New Japanese-American News and the Spanish language La Opinion. The column is written by Frank Colella of the LACMA Public Relations Department.

Citing the large amount of medical advice being disseminated in today's papers, Mr. Saburo Kido, president and publisher of the New Japanese-American News, said, "The public is gullible . . . prone to believe everything it reads. . . . It is important that some responsible agency takes upon itself the work of issuing correct and proper information."

"This will be the most effective means," he continued, of preventing the quacks from taking advantage of the fears and despondency of the sick people."

ACCP Meet is May 29-June 2

The 23rd Annual Meeting of the American College of Chest Physicians will be held at the Hotel Commodore, New York City, May 29-June 2. Fellowship exams will be given May 30. More than 150 physicians will receive Fellowship certificates June 1. For a copy of the program write to: Executive Offices, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

Dr., Wife, Pass State Bar

G. David McClure, M.D., Louisville ophthalmologist, and his wife, Mrs. Gwendolyn Parker McClure, a former teacher, have passed the state bar examinations. The McClures, who have been studying law at night at the U of L School of Law, were among 36 who took the exams in early March.

Doctor McClure was graduated from the U of L School of Medicine in 1946, interned at St. Joseph Infirmary, Louisville, did graduate work at St. Louis, Mo., and a residency at Green Hospital, San Antonio. Mrs. McClure holds a master's degree in chemistry from the U of L and has taught school near each post where her husband has been stationed, including his military assignments from 1950 to 1953.

Ky. Roster, AAGP, is 2nd High

The Kentucky Chapter of the American Academy of General Practice was awarded second place in membership honors during the AAGP's annual Scientific Assembly held recently at St. Louis.

This chapter has twice received national membership honors during the four years Daryl P. Harvey, M.D., Glasgow, has served as chairman of the membership and credentials committee. Kentucky won first place in 1955. The State's AAGP membership has increased from 175 in 1953 to a total of 523 members today, according to published reports.

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Narcotic blank required.

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New KSMA Members

The following physicians were recently added on and welcomed to the KSMA membership roster:

J. L. Stambaugh, M.D., Lexington
A. C. Hohn, M.D., Harlan
Patrick J. Cavanaugh, M.D., Louisville
Raymond E. Jones, M.D., Louisville
C. H. Williams, M.D., Hazard
Robert Pronko, M.D., Pineville
Stuart A. Weiss, M.D., Middlesboro
J. H. Neyer, M.D., Ashland
Howard L. Ravencraft, M.D., Burlington
John P. Stewart, M.D., Frankfort
Esten Kimbel, M.D., Frankfort
P. A. O'Neil, M.D., Leitchfield
Wendell Hurt, M.D., Tompkinsville
J. P. Welborn, M.D., Morganfield
Elmer G. Prewitt, M.D., Corbin
D. W. Parson, M.D., Madisonville

KSMA Members on AAGP Program

Malcolm Barnes, M.D., pathologist, and George S. Allen, M.D., general practitioner, both of Louisville, were guest speakers at the annual scientific meeting of the American Academy of General Practice in St. Louis on March 28. Their discussion pertained to a study made of 600 cases of cervicitis.

Ky. Surgeons Go to I.C.S Meet

Several KSMA members spoke at a sectional meeting of the International College of Surgeons at the French Lick Sheraton Hotel, French Lick, Ind., April 8-10. J. Andrew Bowen, M.D., Louisville, Kentucky regent for the U. S. section of the college, was chairman of the meeting.

Included on the program were Oscar O. Miller, M.D., Louisville, who spoke on "Our Changing Times," and John J. Robbins, M.D., J. Thomas Giannini, M.D., Gordon L. Smiley, M.D., J. Ray Bryant, M.D., Hastel L. Townsend, M.D., J. Herman Mahaffey, M.D., H. Lester Reed, M.D., John R. Smith, M.D., L. Douglas Atherton, M.D., John D. Allen, M.D., William O. Johnson, M.D., and Avrom M. Isaacs, M.D., who gave scientific presentations.

Heart Unit Hears Dr. White

Paul Dudley White, M.D., renowned Boston heart specialist, who spoke at the annual meeting of the Heart Association of Louisville and Jefferson County on April 15 in Louisville, discussed genealogical records and their relationship to advances in preventive medicine.

Ralph M. Denham, M.D., was installed as president of the association. Mrs. Howard W. Pound is president-elect. Robert L. McClendon, M.D., was named vice-president. W. Burford Davis, M.D., is the new secretary and Walter S. Coe, executive committee-man. All are of Louisville.

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SEARLE

News Items

Charles B. Stacy, M.D., Pineville, is the author of a story entitled "A Bad Cup of Tea," which appeared in the April 1957 issue of "Outdoor Life." The well-illustrated article tells of Dr. Stacy's hunting experiences during the several months he was in Africa last year.

Wyatt Norvell, M.D., New Castle, is featured in an article, "Near Life, Near Death, Near God," in the April 13 issue of The Journal of the AMA. Dr. Norvell's Stewardship Sunday service in a lay-preaching experiment in his native Henry County is described under the subhead "Echoes of a Heritage." Dr. Norvell also teaches a Sunday School class and is a vocalist at the New Castle Methodist Church. He is chairman of the KSMA Committee on Rural Health and also the Kentucky Rural Health Council.

Francis D. Willey, M.D., Versailles, has announced his candidacy for the office of Woodford County coroner. A native of Lexington, Dr. Willey began his practice of medicine in Versailles in 1946. He is a graduate of the University of Louisville School of Medicine in the Class of 1939. His internship was served at St. Elizabeth's Hospital in Covington and he was a resident surgeon at the Jenkins Hospital at Jenkins, and at St. Joseph's Hospital, Lexington.

Everett Spees, M.D., formerly of Nashville, is now associated in medical practice with J. C. Denniston,

M.D., Lewisburg. A graduate of the University of Tennessee School of Medicine in 1956, Dr. Spees interned at the Baptist Hospital in Nashville.

Benjamin F. Bradford, M.D., formerly of Paducah, has announced the closing of his office at Paducah and the opening of a new office on April 15 at Metropolis, Ill.

Philip J. Begley, M.D., a practicing physician at Harlan for the past eleven years, has announced his candidacy for the post of Harlan County coroner. A native of Kentucky, Dr. Begley was graduated from the Vanderbilt University School of Medicine in 1939. Dr. Begley served in the European theatre of operations during World War II.

W. D. Epling, M.D., Russell Springs, has received public acknowledgment from the local high school coach and citizens of the community through the TIMES-JOURNAL of Russell Springs, for his "untiring and selfless efforts in behalf of all the boys during their participation in three recent tournaments." Dr. Epling, a graduate of the University of Louisville School of Medicine in the Class of 1954, interned at Good Samaritan Hospital in Lexington.

Charles W. Morris, M.D., clinical director of Central State Hospital, Lakeland, in 1953 has again assumed the position. He succeeds Walter Fox, M.D., who became acting superintendent of the hospital last June. A graduate of Indiana University Medical School in 1940, Dr. Morris took psychiatric residency training at Veterans Hospital and was former chief of the VA mental-hygiene clinic.

Thirst, too, seeks quality



Blue Cross Elects Officers

Attorney James P. Miller, Louisville, has been elected president of the Board of Trustees of Blue Cross Hospital Plan, Inc.

H. Hart Hagan, M.D., was named first vice-president; Charles W. Allen, Jr., second vice-president; Harold H. Moses, secretary; A. E. Norman, treasurer; D. Lane Tynes, executive director. All are of Louisville. Mr. Tynes reports Kentucky Blue Cross membership as 608,605.

Win Industrial Med-Honor

Richard E. Doughty, M.D., and Eugene H. Kremer, Jr., M.D., Louisville, have been elected fellows of the Industrial Medical Association. According to IMA President E. S. Jones, M.D., Hammond, Ind., fellowship in the IMA is "recognition for outstanding work in the field of industrial medicine."

Both Dr. Doughty and Dr. Kremer are medical directors of large industrial plants in the Kentucky metropolis and serve on the staff of several hospitals. Dr. Doughty received his medical education at the University of Cincinnati. Dr. Kremer, a member of the KSMA Labor-Management Health Plan Committee, is a graduate of the University of Louisville School of Medicine.

James C. Drye, M.D., Louisville, has announced the opening of an office in the Fincastle Building for the practice of surgery. A graduate of the University of Louisville School of Medicine in the Class of 1937, Doctor Drye will continue his work at the medical school where he serves as assistant professor of surgery.

Ralph C. Eades, M.D., Valparaiso, Ind., a guest speaker at the County Society Officers Conference at Lexington on April 4, lectures to medical groups in the promotion of science fairs in secondary schools. His native Indiana sent 16 teen-agers, at the expense of the Indiana State Medical Society, to compete with 197 other young scientists in the Seventh National Science Fair at Oklahoma City last year. Four of the young Hoosiers were chosen as first place winners. Their exhibits included an antibiotic from an earthworm, a demonstration of electrophoresis (a new electrical technique for separating proteins in blood), a method for preparing the skeleton of an animal to keep the cartilage intact and permit the skeleton to be molded rather than wired into shape, and an experimental answer to the question of what happens to the potential energy of a wound up spring when it is dissolved in an acid.

The 23rd Annual Meeting of the American College of Chest Physicians will be held at the Hotel Commodore, New York City, May 29-June 2, 1957. For further information write Murray Kornfeld, executive director, American College of Chest Physicians, 112 East Chestnut St., Chicago 11, Ill.



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T. N. KENDE, M.D., Neuropsychiatrist
Medical Director

T. J. SMITH, M.D., Associate

In Memoriam

D. T. ROBERTS, M.D.

West Point

1894 - 1957

Doctor Roberts died April 8 at his home at West Point, following a year's illness. He had practiced medicine in Jefferson, Hardin, Bullitt and Meade Counties for the past 35 years.

Doctor Roberts graduated from the University of Louisville Medical Department in 1922. He was an Army reserve lieutenant colonel.

JOHN B. VIGLE, M.D.

Burnside

1878 - 1957

A native of Russell County, Doctor Vigle died March 24 of cerebral thrombosis at a Lexington rest home. He was 79.

Doctor Vigle was graduated from the University of Louisville Medical Department in 1906. He formerly operated a hospital at Chattanooga, Tenn., before moving to Burnside about 15 years ago.

WILLIAM F. STUCKY, M.D.

Dawson Springs

1880 - 1957

A Dawson Springs physician 24 years, Doctor Stucky 77, died April 17 at the Jennie Stuart Memorial Hospital in Hopkinsville after a three-week illness. He practiced medicine in Jeffersontown before moving to Dawson Springs in 1933.

Doctor Stucky, a native Kentuckian, was graduated from the Hospital College of Medicine in 1902. He had served as recording steward of the Methodist Church more than two decades and was a member of the Dawson Springs Masonic Lodge.

DANIEL V. BENTLEY, M.D.

Neon

1887 - 1957

Doctor Bentley, 69, died April 2 in a Lexington hospital of injuries suffered in an auto accident near Whitesburg, when his car plunged from the highway into the Kentucky River.

A native of Neon and a graduate of the University of Louisville Medical Department in 1917, Doctor Bentley had been in ill health for some time. His community honored him in 1955 for forty years of local medical service.

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County Society Reports McCracken

A program honoring E. W. Jackson, M.D., was held at the February 27 meeting of the McCracken County Society at Paducah. Leon Higdon, M.D., reviewed Dr. Jackson's "long and unselfish service" and his contributions to "Riverside Hospital and the medical profession."

A letter from the Massac County Medical Society, Metropolis, Ill., was read, relative to three physicians who had purchased space in the yellow section of an Illinois telephone directory. Letters from the physicians involved, expressing their regret over the incident, were also read.

A request from C. C. Howard, M.D., urging action in the Polio Vaccine Program, was turned over to Winfield Stryker, M.D., and his polio committee.

A request from the Four Rivers Council, Boy Scouts of America, for help to set up a first aid station at their camp lodge, was held for further investigation and possible individual response, in view of the Society's policy against charitable contributions.

A letter was read from John C. Quertermous, M.D., of the Associate Committee on Postgraduate Medical Education, concerning the institution of annual postgraduate programs by the U of L Medical School for West Kentucky. It was reported that a letter had been forwarded notifying Dr. Quertermous of the Society's approval of the program on a trial basis.

James A. Ward, M.D., reported that at a meeting of the Maternal and Newborn Death Investigating Committee on February 17 in Louisville, the committee decided investigations of maternal deaths
(Continued on Page 477)

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- ☐ Partnership Formation
- ☐ Sale of Practice
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MEDICAL DIRECTOR

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Adults: usually one 25 mg. tablet, or two tsp. Syrup, three times daily.

Children: (over 3 years): usually one 10 mg. tablet, or one tsp. Syrup, twice daily.

Supplied: Tablets, tiny 10 mg. (orange) and 25 mg. (green), bottles of 100. Syrup, 10 mg. per tsp., pint bottles.

Since response varies from patient to patient, dosage should be adjusted accordingly. Prescription only.



Chicago 11, Illinois



County Society Reports

(Continued from Page 475)

would be undertaken immediately, while fetal death investigations would be delayed. The circulation of questionnaires by the committee was approved, to be reviewed at least twelve months after the death of a particular case. Dr. Ward reported the committee's decision that a doctor at the local level should coordinate this activity.

Vernon D. Pettit, M.D., Secretary

Fayette

President A. B. Barrett, M.D., presented a paper on the "Relation of Functional Ovarian Tumors to Primary Infertility," at the March 12 meeting of the Fayette County Medical Society, held at the Good Samaritan Hospital.

Recommendations from the executive committee were approved, including a resolution that the Society endorse and participate in the Salk Polio Vaccine Program and appoint a committee to implement the program. Franklin B. Moosnick, M.D., was named committee chairman and directed to name his co-workers.

The Society declined to make any nominations for the "Help the Handicapped" service, following a request from the Vocational Rehabilitation office.

A request for Society cooperation in automobile accident prevention was referred to the Public Health and Legislation Committee.

A motion on a proposed amendment to the Consti-

tution to form a Special Medical Services Committee failed to carry.

Members of the Medical Education Committee were announced, including James T. McClellan, M.D., chairman, Z. S. Gierlach, M.D., Logan Gragg, M.D., A. S. Warren, M.D., and J. B. Holloway, Jr., M.D.

The application for membership of William R. Willard, M.D., was approved.

A lecture on cancer research at the University of Kentucky on May 17, to be sponsored by the Sigma Xi fraternity, was announced.

T. R. Bryant, Jr., M.D., Secretary

Scott

At the March 7 meeting of the Scott County Medical Society, held at the John Graves Ford Memorial Hospital at Georgetown, H. V. Johnson, M.D., Georgetown, was elected president to fill the unexpired term of W. S. Allphin, M.D., deceased. A. F. Smith, M.D., Georgetown, was named vice-president.

Motions unanimously carried by the Society included one in which the Society would "go on record as favoring an independent local taxing unit in Scott Co. for the support of the work of the State Health Department," and another "that a Grievance Committee be selected to study and review any complaints that were relevant to the practice of Medicine in this county." The committee would consist of the entire Scott County Medical Society.

H. V. Johnson, M.D., President

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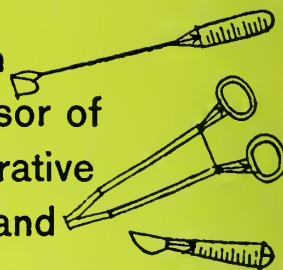
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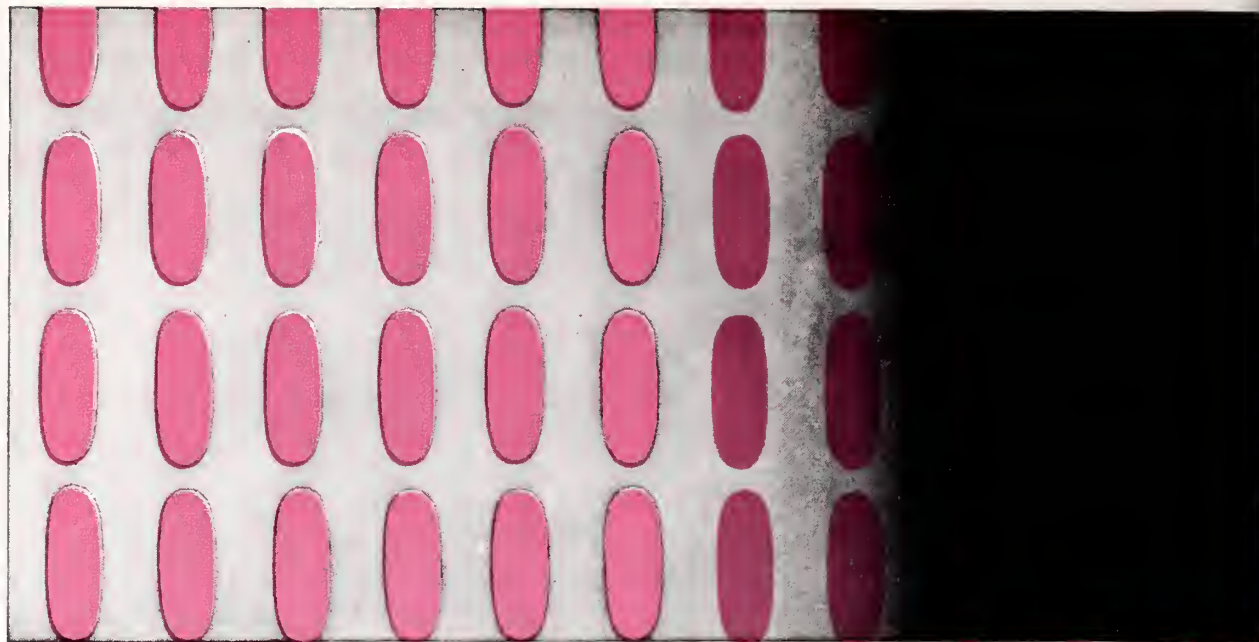
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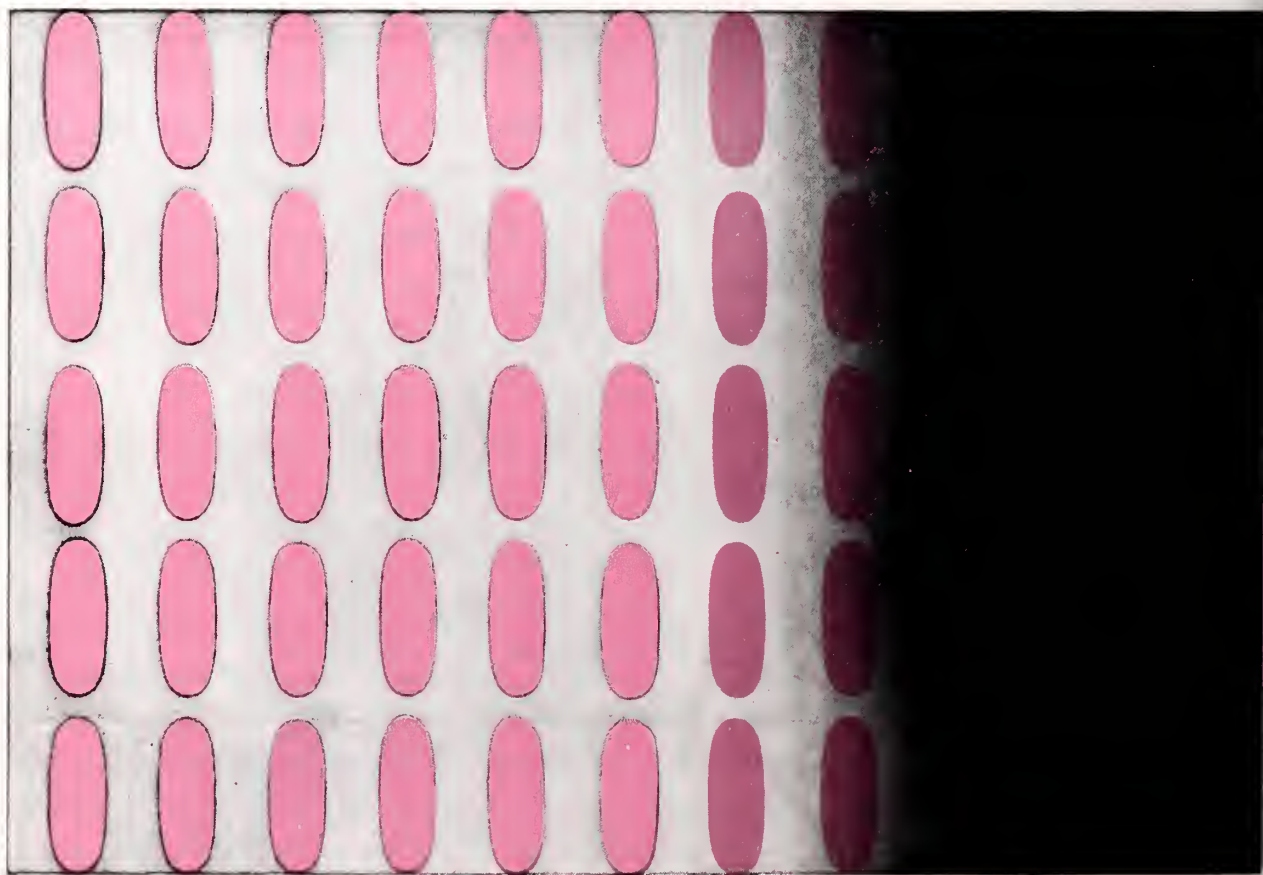
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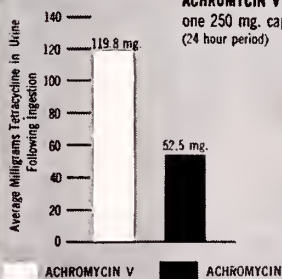
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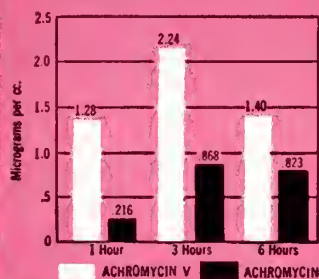
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*Ferguson, J. T., and Linn, F. V. Z.: *Antibiotic Med. & Clin. Therapy* 3:329, 1956.



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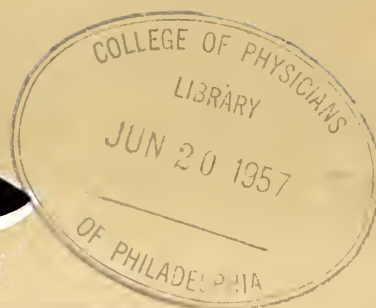
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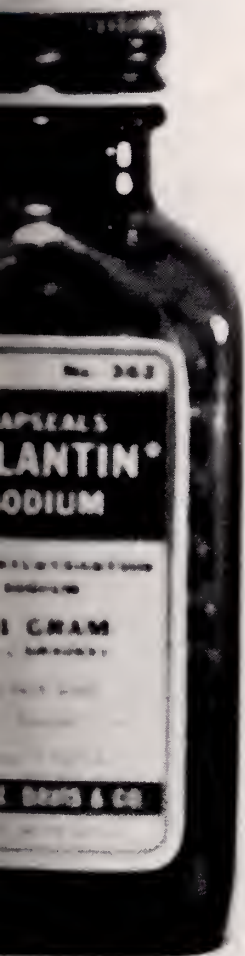
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1. Zimmerman, E. T., and Burgemeister, B.: *Arch. Neurol. & Psychiat.* 72:720, 1954.
2. Zimmerman, E. T., and Burgemeister, B.: *J.A.M.A.* 157:1194, 1955.
3. Zimmerman, E. T.: *Arch. Neurol. & Psychiat.* 76:65, 1956.

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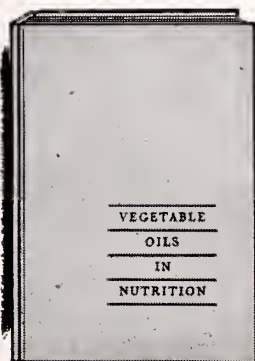
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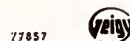
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**message
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The May primaries have selected the party nominees who will be voted on at the general election this fall for the various county offices, and have nominated candidates for the Kentucky Legislature in the House and in some instances the Senate.

As a part of being a good citizen in your community, every KSMA member should make it a point to acquaint himself adequately with the candidates prior to the election to find out what they propose to do once they are elected.

In the next five months before the general election is held, every KSMA member should have an opportunity to discuss with those candidates who seek to represent them their views on matters that affect the health and welfare of the people. We can assure you that the candidates will welcome your efforts.

It is the natural obligation and responsibility of the medical profession to guard the health of the people and to see that legislation not in the public interest is defeated in Frankfort. If your representative or senator is aware of your interest in seeing that the people get proper medical care and health services, prior to the election, you will be more welcomed by him in Frankfort during the Legislature when it is time to discuss scientific problems.

All of us are aware of the average busy physician's reluctance to become specifically interested in these matters. However, as good citizens it is just as important for physicians to guide legislation affecting the health of our people as it is to treat a specific patient. Our senators and representatives perhaps appreciate this fact more than we do. Let us not let the people we serve down!

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WASHINGTON NEWS DIGEST



Washington, D.C.—Again the Jenkins-Keogh plan is up for consideration in Congress. While there is no assurance it will be passed, or even get out of the House Ways and Means Committee, many sponsors of the legislation this year are united in one organization and are making themselves felt on Capitol Hill.

Briefly, this bill would allow any self-employed person to put a limited portion of his income into a retirement fund without paying income taxes on the money. Taxes would be paid when the money was received as pension or retirement.

Sponsors of the Jenkins-Keogh plan point out that it very definitely is not legislation to give a special tax advantage to one group of people. For one thing, every self-employed person would be eligible, from farmers to doctors and from opera singers to architects. For another, corporations since 1942 have been allowed to put money into retirement funds for their employees without payment of federal taxes on the money; the self-employed merely want the same consideration.

At various times the American Medical Association has led in the campaign for enactment of legislation of this type. Two years ago the House Ways and Means Committee voted to report it out, as part of a broader tax bill, but the committee never actually got around to sending the combined bill to the House floor.

Now the lead is being taken by a newly-formed American Thrift Assembly, or officially the American Thrift Assembly for Ten Million Self-Employed. In addition to the AMA, the new group has the support of American Dental Association, American Bar Association, and a score or more of other national organizations that represent the self-employed.

After the Congressional session was well under way, the ATA surveyed the political-legislative climate and found it favorable for Jenkins-Keogh. Then in early May the assembly asked its constituent associations to go to work. They were urged to have all members contact the House Ways and Means Committee with requests that the Jenkins-Keogh bill be reported favorably to the House floor. Assembly strategists are confident that if the committee hears from enough of the people who would be affected, it will approve the bill before adjournment. Then, if there isn't time for House action this year, that step can come next year.

Economy has been the main obstacle in the path

of Jenkins-Keogh—the fear on the part of the Treasury Department that passage of the bill would mean a serious loss of income tax revenue. However, the Treasury has never denied that the bill is justified to equalize tax status for the self-employed in relation to corporation employees.

Answering the economy argument, the Assembly makes two points:

First, the set-aside funds, invested in the country's economy, would stimulate business and develop far more in new income tax payments that it would cost.

Second, because the self-employed who retain their health rarely retire at any arbitrary age, many of them in the years past 65 would remain in a tax bracket not significantly lower than when they paid into the retirement fund.

NOTES:

When Congress votes the money, the new home of the National Library of Medicine will be constructed at Bethesda, Md., near the National Institutes of Health and the Navy Medical Center. This site was selected by the board of regents at its second meeting.

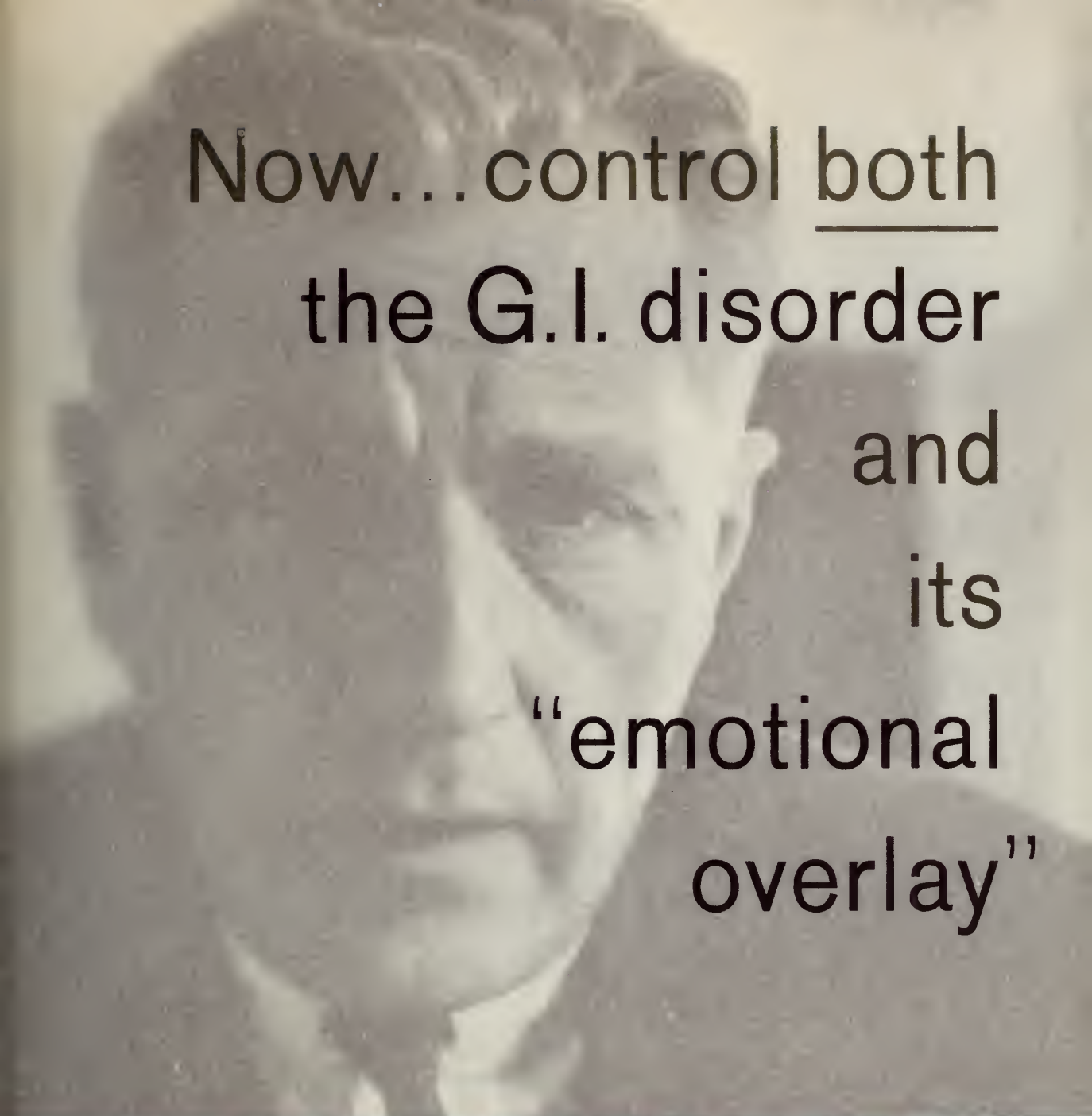
At the request of Speaker Rayburn, the House Interstate and Foreign Commerce Committee has set up a special subcommittee with authority to find out if government agencies are expanding their operations beyond limits intended by Congress. The subcommittee expects to continue its investigations between the sessions of Congress.

The continuing national health survey is under way. Each month from now on, 140 Census Bureau interviewers will visit 3,000 homes, asking questions about illness and disability. On the basis of the data collected, the Public Health Service will publish national and regional reports on morbidity and mortality.

Because of his achievements in the advance of mental health, William C. Menninger, M.D., has been selected by the U.S. Chamber of Commerce as "one of the great living Americans."

Because of widespread interest aroused by Senate hearings, there is considerable pressure for action before adjournment on legislation for some form of federal control over union welfare funds. One bill, by Senator Goldwater, would lay down strict procedures, including regular audits.

Also before Congress, but not making rapid progress, is a bill that would give the federal government control over amphetamines and barbiturates. Various types of bookkeeping and registration would be required, but physicians would be exempt from the requirements. It has administration support.



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• PATHIBAMATE... "will favorably influence a majority of subjects suffering from various forms of gastrointestinal neurosis in which spasmodic manifestations and nervous tension are major clinical symptoms."⁷

• "In the patients with functional disturbances of the colon with a high emotional overlay, this has been to date a most effective drug."⁵

References: 1. Borrus, J. C.: *M. Clin. North America*, In press, 1957. 2. Gillette, H. E.: *Internat. Rec. Med. & G. P. Clin.* 169:453, 1956. 3. Pennington, V. M.: *J.A.M.A.*, In press, 1957. 4. Cayer, D.: Prolonged Anticholinergic Therapy of Duodenal Ulcer. *Am. J. Dig. Dis.* 1:301-309 (July) 1956. 5. McGlone, F. B.: Personal Communication to Lederle Laboratories. 6. Texter, E. C., Jr.: Personal Communication to Lederle Laboratories. 7. Bauer, H. G. and McGavack, T. H.: Personal Communication to Lederle Laboratories.

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IN THE BOOKS



WHEN DOCTORS MEET REPORTERS

Compiled by Hillier Krieghbaum from record of conferences sponsored by the Josiah Macy, Jr. Foundation. Published by New York University Press. 119 pages.

Under the auspices of the Josiah Macy, Jr. Foundation a group of physicians and science writers first met on June 1, 1953 to explore the possible ways to improve the press reporting of medical news. During the following three years additional meetings were held.

With both having their own code of ethics, which were as far removed from each other as that of the Hottentots and the Eskimos, it was evident some common meeting ground would have to be reached. Both groups were generally thinking of their acts in the light of public interest but the facts were different. The physician looks on his as educational, while the science writer thinks of his as news value.

It was found that to get better cooperation between these two, the science writer should have a better understanding of the workings of the hospitals before he is called in on a story.

In this same way it was proved invaluable to both the medical profession and the press that before a meeting some well-qualified person or persons brief the press on the whole program, spotting the stories and giving the significance of them.

The biggest problem to face in the whole relationship was a more friendly understanding between physician and reporter and a deeper appreciation by each of the ethical standards of the other, neither attempting to censor, but both seeking to see that neither the physician mentioned nor the public was exploited by any article printed.

It is to the credit of both the medical profession and the press that the problem be recognized: that public interest is the ultimate concern of both parties.

David M. Cox, M.D.

"WOMEN DOCTORS OF THE WORLD"—by Esther Pohl Lovejoy, M.D. Published by the MacMillan Company, New York 11, N. Y. 413 pages; price \$5.95.

The author states in her preface to this book that she served for many years in the dual role of president of the Medical Women's International Association and director of American Women's Hospitals. Her duties in connection with both of these organizations took her into many foreign countries where she met outstanding women physicians. During these years she received many inquiries from writers and from

young women considering medicine as a career. This book was written in attempt to answer, with facts, the inquiries she had received.

She begins her book by reminding us that the healing art was, in the beginning, the special province of women, as is evidenced by pictorial accounts of earlier civilizations. It was only after medical schools were established and their admissions confined to men that women's presence in the field of medicine began to be looked upon with disfavor. Midwifery continued for sometime, however, to be regarded as woman's natural sphere, and the midwives, in turn, fought bitterly against the invasion of their field by men who were trained physicians.

Medical education of women had its beginning in America, which fact appears to be in keeping with the pioneer spirit of this new country. The first American woman physician to receive a degree in this country was an antecedent of Benjamin Franklin, named Lydia Folger Fowler. Her graduation took place in 1850. Elizabeth Blackwell, M.D. the first woman to receive a degree in this country (in 1849), was a native of England who came to this country to study.

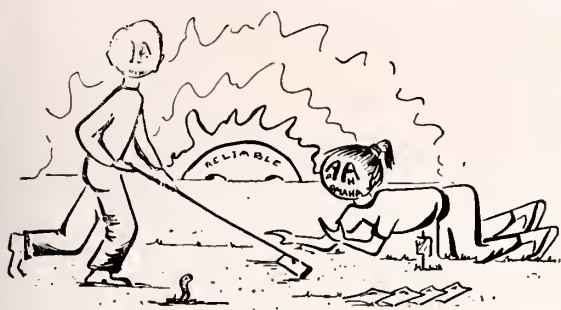
The establishment of the Woman's Medical College of Pennsylvania in 1950 heralded the opening of similar institutions, nineteen in all, in various sections of the United States but as more and more medical schools became co-educational these schools disappeared with the exception of the now famous Woman's Medical College of Pennsylvania.

Following its beginning in America, education of women in medicine spread to England, then to continental Europe, and thence to other countries. The author recognizes the fact that it is still somewhat more difficult for women to gain admission to schools of medicine but, as she points out, many well qualified men are also denied the opportunity owing to limited enrollment of our schools. In 1950, there were approximately 11,000 women doctors in the United States.

The book contains extensive description of the contributions of outstanding women physicians, such as Bertha Hoosen, Maude Abbott, Florence Sabin, Helen Taussig, Martha Eliot and many others, and Kentucky's own Lillian South, M.D., is mentioned in connection with her activities in the American Women's Hospitals fight to eliminate pellagra in Whitley County during the depression years.

The author is to be commended for an interesting contribution to the history of medical education.

Helen B. Fraser, M.D.



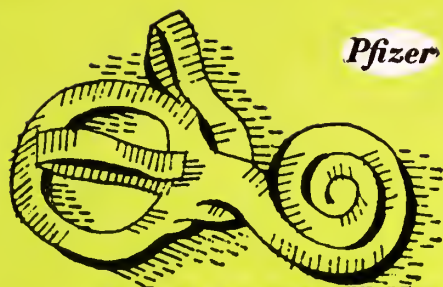
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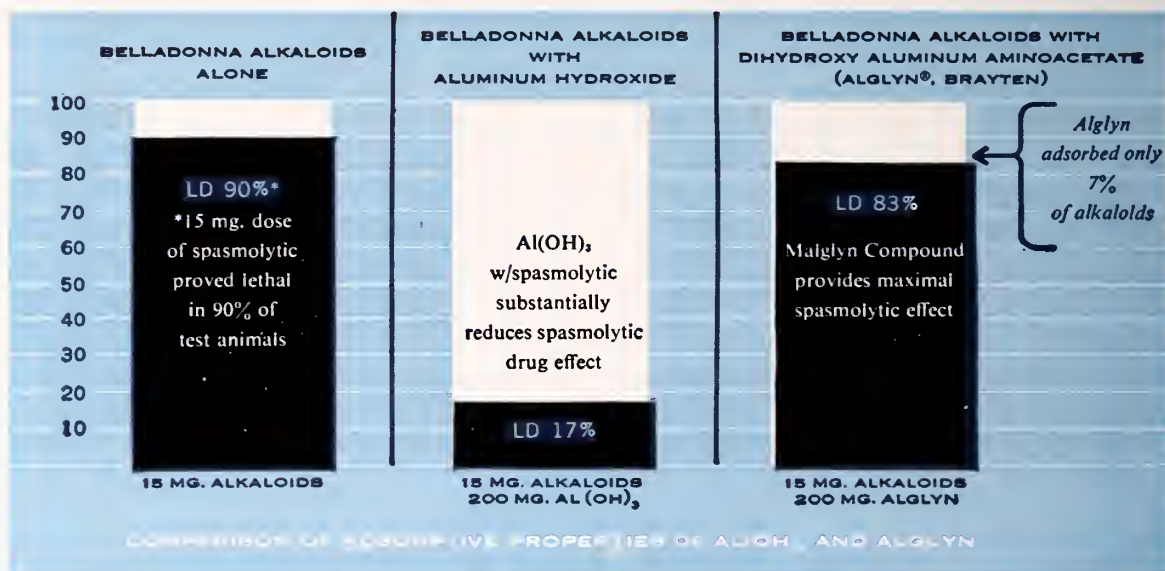
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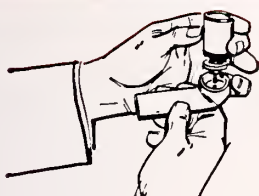
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¹ Meprobamate is the only tranquilizer muscle-relaxant

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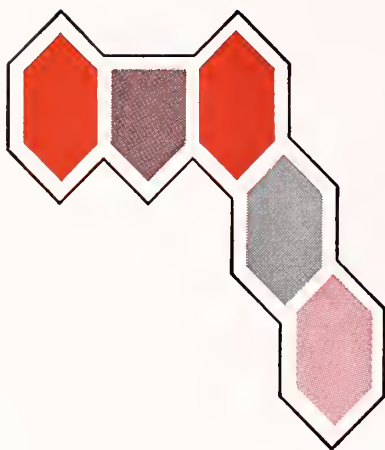
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Safety—plus marked clinical effectiveness

Harmonyl proved particularly effective, for example, in tranquilizing a group of 40 chronically ill, agitated senile patients.¹

Of particular interest is the observation that patients became more lucid and alert on Harmonyl therapy. And there was a complete absence of side effects with Harmonyl—although a similar group on reserpine developed such side effects as anorexia, headache, bizarre dreams, shakes, nausea and vomiting.

Following another eight-month study of chronic, hospitalized mental patients, Ferguson² stated:

- Harmonyl benefited at least 15% more

overactive patients and proved more potent in controlling aggression—requiring only one-half to two-thirds the dosage of reserpine.

- Patients experiencing side reactions on reserpine often were completely relieved when changed to Harmonyl.

Ferguson concluded: "*The most notable impressions were the absence of side effects and relatively rapid onset of action with Harmonyl.*"

Comparative studies have shown Harmonyl and reserpine about equal in hypotensive effect. The tranquilizing action of the two drugs also appeared similar—except that few cases of giddiness, vertigo, sense of detached existence or disturbed sleep were seen with Harmonyl.

Professional literature is available upon request. Harmonyl is supplied in 0.1-mg., 0.25-mg., and 1-mg. tablets.

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References: 1. Communication to Abbott Laboratories, 1956. 2. Ferguson, J. T.: Comparison of Reserpine and Harmonyl in Psychiatric Patients: A Preliminary Report, *Journal Lancet*, 76:389, December, 1956. *Trademark

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Paris, too, knows and uses Pentothal...

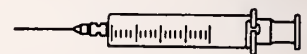


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JUNE, 1957

NO. 6

THE SURGICAL TREATMENT OF CHRONIC PANCREATITIS*

RALPH F. BOWERS, M.D.

Memphis, Tenn.

THE last decade has seen significant advances in the treatment for chronic pancreatitis, reversing in a material way a spirit of hopelessness about the situation to one of hope. Although control of the disease is not perfect, one can rely upon a 50 per cent to 80 per cent chance for satisfactory control, if the cases are properly selected for operation. Medical therapy is no longer considered to be efficacious, and can at best offer nothing but poor symptomatic therapy. The disease is a tragic one, ending in death after a long period of invalidism, economic and domestic frustration. The simplest surgery, of course, is the method of choice for any surgical condition, but this disease well warrants extensive surgery even with slightly elevated risk, if these gastrointestinal derelicts have a reasonable chance to be free of the devastating attacks, because the less extensive procedures have not proved too satisfactory.

One cannot side-step the fact that the biliary tract is often diseased or involved in some way in a great number of these cases. Etiological mechanisms include bile regurgitation into the pancreatic duct under pressure, or with some not-well-understood relation which results in the pancreatic infection.

The presence of bile in the pancreatic duct is not enough, because it has been observed in the pancreatic duct in normal persons who show no manifestation of pancreatic infection. Many have attempted to ignore the role bile plays in the etiology, and suggest pancreatic duct obstruction, but if this is true, why do we not observe chronic symptomatic pancreatitis in patients who have known pancreatic ductal ob-

struction from other causes, such as carcinoma of the pancreatic head, or extrinsic tumors which completely or partially obstruct the duct? Aneurysms of the hepatic, splenic and pancreaticoduodenal arteries have produced pancreatic duct obstruction, but have not induced the manifestations of pancreatitis.

Improper nutrition, alcohol consumption, sympathetic nerve over-stimulation, and vascular changes have been suggested as other possible etiological agents.

Realizing the truth of the association of biliary tract disease, many surgeons have successfully advocated (1) biliary tract surgery alone; (2) biliary surgery plus sphincterotomy; (3) choledochoduodenostomy or jejunostomy; (4) caudal pancreaticojejunostomy. All of these procedures can prevent the entrance of bile into the pancreatic duct, or if bile is permitted to enter the duct, it cannot do so under pressure, or whatever circumstances are needed to alter the visiting bile in such a fashion as to prevent the flareup of the infection.

It must be emphasized that conservative non-surgical therapy has proved to be highly satisfactory for the treatment of acute pancreatitis. The pure form of chronic pancreatitis usually follows an acute attack, and in the form of recurring, acute attacks for a period of time. If the patient is fortunate enough to survive many of these attacks, the pancreas undergoes fibrosis, and approaches what is known as the "burned out" pancreas, when pancreatic insufficiency is manifested by steatorrhea, mild diabetes, cachexia, and weakness. Almost all observers agree that surgical efforts must be made before the "burned out" stage of the infection is reached.

Time and space will not permit a discussion about the diagnosis of chronic pancreatitis, but

*From the Surgical Service, Veterans Administration Medical Teaching Group Hospital, Memphis 15, Tennessee.

one must mention the fact that there are patients with pancreatic calcification who demonstrate no symptoms of pancreatitis, and others who present vague upper abdominal symptoms but who never become gravely ill. It is a matter of excellent judgment to know when the mild pancreatitis is causing only slight symptoms which are greatly magnified by an emotional overlay. These people will not benefit from operative therapy of any type, and create a problem for the proper evaluation of the results. Experience with the disease usually permits the clinician to calibrate fairly accurately the chances for success or failure.

With these generalities in mind, I wish to present our plan for therapy in these cases, a plan which in our hands has evoked 80 per cent control of the freedom from attacks of pancreatitis.

Biliary Tract Surgery When The Acute Attack Subsides

X-ray studies are made of the gallbladder. If stones are present, cholecystectomy is performed and the common duct explored when cholangiography or the judgment of the seasoned surgeon indicates exploration. All stones are removed from the duct, after which the sphincter of Oddi is dilated with Bake dilators and a short-arm T-tube inserted. The T-tube does not enter the duodenum. It remains in place approximately three months. Usually there are no pancreatic attacks while these T-tubes remain open, a fact which many years ago suggested the use of a definite and permanent shunting operation later, if this relatively simple biliary tract surgery failed to permanently control the disease.

The exact number of successes is not known, but it is believed that 40 per cent to 60 per cent of the cases will be controlled by the biliary tract surgery alone. A recent report by Sanchez-Ubeda, Rousselot and Giannelli⁸ suggests that 90 per cent of the cases may be controlled in this way. I feel that the figure 90 per cent is too high. The peculiar induration in the pancreatic head is not uniformly observed by surgeons, and indeed the confusion about its significance is great. Nevertheless, patients are being controlled by biliary tract surgery.

Choledochojejunostomy

If attacks recur after proper biliary surgery, or no disease of the biliary tract could be demonstrated by X-rays, and the patient con-

tinues to experience recurring attacks, choledochojejunostomy en Roux Y is performed. We simply wait until it is evident that recurrent attacks are likely, but do not procrastinate so long that the patient undergoes a long period of invalidism. Obviously, it would be incorrect to perform the operation after the first attack, because some patients experience no more attacks, especially if they do not subsequently use alcohol. The operation requires transection of the common duct, which all surgeons hesitate to do. We insist that the disease is so terrifying that the common duct transection is justified. There has been only one com-

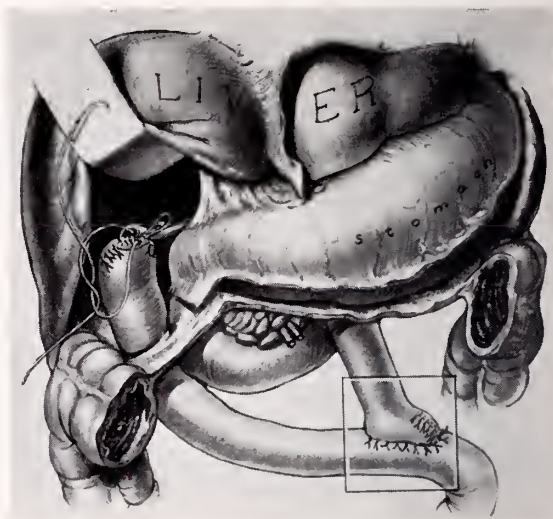


Figure 1

mon duct stricture in 19 operated cases, and that one was easily corrected with proper anastomosis working satisfactorily five years later. The cause of the stricture was a small common duct in a 250-pound patient, which made the making of the anastomosis very difficult. His recovery and control are remarkable. He now weighs 365 pounds, and has no pancreatic symptoms, and can eat and drink anything that anyone else enjoys. Furthermore, we do not hesitate to cut the duct in cancer of the pancreas, for trauma or palliation, if it is necessary. Nowadays a surgeon is expected to be able to transplant a common duct to a desired segment of intestine without undue mortality or morbidity.

After transection of the duct,¹ the jejunum is transected and proximal end of the common duct is anastomosed to the distal end of the jejunum. Jejunojejunostomy re-establishes the continuity of the gastrointestinal tract. (Figure 1).

There has been one failure to control the attacks in 19 patients. Several patients have been followed eight, seven, six, five years or less—periods of time long enough to establish something about the permanency of control and the appearance of late postoperative sequelae. The one patient designated as a failure developed a pseudocyst, which was internally drained about one year later. He still has slight attacks for which he enters the hospital two or three times per year, for short periods of time. He works about three-quarter time, and bitterly resents the allusion to the “failure,” because he has been greatly benefitted by the operation. There is not a single instance of peptic ulcer formation, a situation which is commonly observed in experimental animals. The human is probably protected by the alkaline pancreatic juice and the abundant alkaline secretions from Brunner’s glands, which do not exist in great numbers in experimental animals. Most of the patients have returned to work, unless alcohol consumption prevents this. A few consume large quantities of alcohol. The advocates of sphincterotomy claim that failure after sphincterotomy is due to excessive alcohol consumption. We advise all pancreatitis patients to avoid use of alcohol. It has not been shown that alcohol induces attacks after choledochojejunostomy. As a matter of fact, one of the disadvantages of the operation comes from improvement in gastrointestinal function, resulting in use of more alcohol simply because the patient can now tolerate it, and that alone has caused one divorce and broken up about six automobiles!

The score is not perfect, but the results for this phase of the work are not far behind the good results obtained by gastric resection for well-selected peptic ulcer patients. It is admitted that the patients are carefully selected, but who wishes to advocate sloppy surgical thinking in the selection of cases for any type of surgery? Good results in other surgical conditions will not be obtained if the cases are improperly selected.

Sphincterotomy⁴ was originally employed to prevent bile from entering the pancreatic duct. If properly performed, it obliterates spasm of the sphincter of Oddi, and the absence of the spasm permits the bile to flow only into the duodenum rather than enter the pancreatic duct, or certainly not under pressure if it does enter the pancreatic duct. The so-called com-

mon channel, which is in effect a cloaca in which the pancreatic and biliary ducts meet a short distance proximal to the ampulla, is not necessary to permit the regurgitation. The muscular arrangement around the ampulla is such that the bile can be passed into the pancreatic duct even without the presence of the common channel.

Actually then, sphincterotomy was devised to prevent the entrance of bile into the pancreatic duct. It is probably correct to state that control of attacks is achieved in 40 per cent of the cases by this operation.

It occurred to us that if it were desirable to prevent bile from entering the pancreatic duct, then why not transplant it to a segment of intestinal tract, distal to the duodenum, and where it would be impossible for bile to enter the pancreatic duct? Hence, the use of choledochojejunostomy, the Roux Y part of which is done

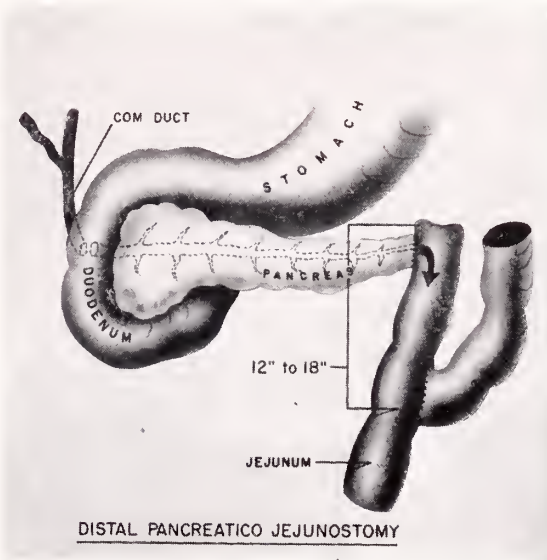


Figure 3

to prevent ascending cholangitis and probably better the healing of this important anastomosis.

The above statements confirm the possibility of performing the operation with no mortality thus far (19 cases) and little morbidity.

Caudal pancreaticojejunostomy may permit bile to pass through the pancreatic duct into the jejunum and not allow the altered pressure, or other conditions which light up the infection, to exist. Longmire⁶ has not had much success with this operation, but DuVal⁵ has apparently achieved very good results. (Figure 3). However, DuVal uses it only when pancreatic duct obstruction is proved, and when the infection is approaching the “burned out” state. He does

not use it in the stage of recurring acute attacks, the phase which has been so successfully treated by choledochojejunostomy in our hands. It appears also that choledochojejunostomy will fail if the cases are improperly selected, and for the few cases in which bile regurgitation is not the responsible etiological factor.

Thoracic sympathectomies and vagotomy have not produced good results, although some improvement in the pain problem may be had.

Pseudocysts

Somewhere along the course of the infection, a cystic mass or masses may appear. They must be the result of spillage or infiltration of pancreatic enzymes into or about the pancreas, which produces necrosis, inflammation and cystic breakdown, which by this time is now enclosed in fibrous tissue so firmly that absorption by the lymphatics and blood vessels cannot properly take place. These may enlarge, remain dormant and asymptomatic or may be associated with mild attacks of pancreatitis, or

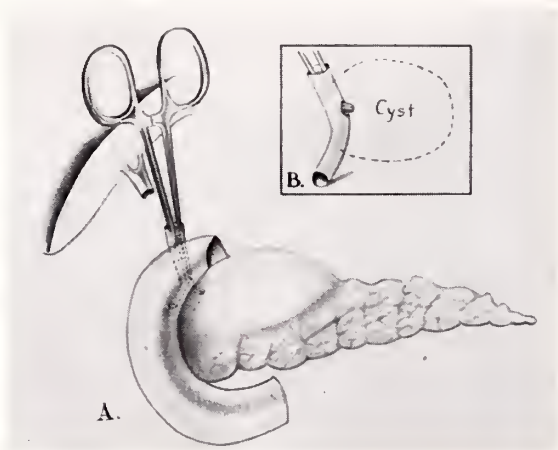


Figure 2

produce significant pressure symptoms. Undoubtedly, we see many small cystic areas which do not present a problem.

If they are large and symptoms are experienced by the patient, drainage is desirable. These are not true cysts, inasmuch as the lining is non-epithelial. Therefore, the term "pseudocyst" is a proper one, and the lining is merely scar tissue or fibrous tissue. All textbooks and manuscripts on the subject state that excision of the cyst is the method of choice, but when this cannot be done drainage, internal or external, is next best. We have successfully excised five pseudocysts. If there is doubt about the safety of excision, drainage should be employed.

We observed and drained one pseudocyst at

the time of the choledochojejunostomy, by merely establishing a connection between the pseudocyst in the pancreatic head and the distal and ligated stump of the common duct. (Figure 2). The drainage was simply accomplished by bluntly introducing a curved clamp in the stump of the common duct, and by sudden pressure forcing the clamp into the cyst which was adhered to the common duct, the fistula thereby being established. The patient has shown no sign of recurrence of this pseudocyst five and one-half years later.

One other patient, the one designated as a failure, developed a pseudocyst approximately one year after the choledochojejunostomy. Cyst-gastrostomy was accomplished by (1) incision into the anterior wall of stomach; (2) location of the cyst through this gastrotomy; (3) incision through the posterior wall of the stomach, which permits the knife to plunge into the pseudocyst. The rim of the opening thereby produced was sutured with chromic catgut, but the necessity of this suturing is doubted, because the two structures seemed to be perfectly cemented to each other. In spite of the fact that his attacks have not been perfectly controlled, there is no evidence, roentgenologically or clinically, that the pseudocyst has recurred.

Drainage of these cysts can be done externally, usually termed as marsupialization, or internally, with cystenterostomy or cystgastrostomy as the recognized procedures. All surgeons who have used the internal drainage are sure that the internal method is far superior to the external. It is simple to perform and does not require the dreaded long period of invalidism or drainage that often accompanies marsupialization. Permanent eradication of the pseudocyst is accomplished and no complicating sequellae have reportedly been noticed by anyone.

There will arise occasions when the operator will need to employ marsupialization, because in exploring the cyst the wall has been shattered to a point where safe cystenterostomy or gastrostomy cannot be accomplished. Recurrences are fairly frequently seen after marsupialization. It is not as good as the internal drainage operation.

When the problem of drainage of a pancreatic cyst is confronted at the operating table, one uncommon but extremely important decision must be made. A few of the cystic lesions in the pancreas are due to cystadenoma², a

neoplasm which eventually becomes malignant and many years later may kill the patient. It cannot be diagnosed clinically or roentgenologically, but when incision is made into this cyst, the appearance of the walls and contents is different from the findings in the pseudocyst, or pure pancreatic cysts. There are finger-like processes hanging from the walls of the cyst in cauliflower-like clumps, and when these are observed the operator can be quite certain about the neoplastic nature of this cyst. A frozen section will prove the presence of the cystadenoma for which excision is the only method of therapy. This may be quite difficult and sometimes impossible.

When The Infection Is in The "Burning Out" or 'Burned Out" Phase

This final consideration for therapy in chronic pancreatitis reflects the most disheartening group of patients in the entire discussion. Therapy has not been successful to the degree achieved in the foregoing three categories and there are many reasons for it.

First of all, one often observes a patient with vague, low-grade symptoms, when the pain and indigestion are mild, so mild that one wonders if the symptoms are really the result of the pancreatic infection. Often the emotional overlay is so great that the best psychological and clinical appraisals about the verity of the symptoms are not correct. One cannot long deal with chronic pancreatitic patients without encountering the great emotional difficulties of these patients. In effect, the surgeon must use psychotherapy in addition to his surgical maneuvering. Indeed, in the postoperative period, the surgeon's ability to correctly adjudge the emotional situation and to adjust himself, the team and the nurses to this critical need of the patient's, may well influence the final result. This emotional problem is also experienced in the other categories mentioned above, but not as seriously. Therefore, the first problem in this group revolves around the diagnosis, the accurate role of the pancreatic infection and the patient's mental stability.

When the infection is in this terminal stage, the acute attacks begin to subside in favor of continuous, but less severe pain, indigestion, mild diabetes, steatorrhea, anorexia, weight loss, severe malnutrition, cachexia, anemia and death, in that order of progression. However, this is a slow process and there is ample time

to interrupt the infection surgically before irreversible changes are present.

Obviously then, it is necessary to control the infection before these serious clinico-pathological changes occur. If possible, categories I, II and III, or a combination of them, should have been exploited first, and according to our present knowledge, many patients could have been salvaged along the way. The slogan then is a simple one, and definitely prophylactic besides eradicating the distressing symptoms: "Do not permit the pancreatic infection to enter the stage of burning out."

The choice of procedures here is difficult, because no one can select a procedure which has been as satisfactory as the operations mentioned above for the other phases of this disease.

We have had no success in treating the disease at this stage. Thoracic sympathectomy, unilateral or bilateral, will often ameliorate the pain, and according to Hinton, et al,⁷ effect some favorable changes in the pancreas, but does not alter the infection much. Vagotomy has failed in this group, as have sphincterotomy, choledochojunostomy and, according to nearly everyone except DuVal, caudal pancreaticoduodenectomy. Cattell³, and later Longmire, have advocated partial or total pancreatectomy for this phase of the infection, and this may prove to be correct, although one will be hard put to choose the cases correctly until mortality and morbidity in every one's hand reach a lower level than is now enjoyed. Undoubtedly, if one can accurately prognose the certainty of death or total invalidism, then pancreaticoduodenectomy is indicated. Choledochojunostomy would have one other disadvantage in the "burning out" pancreas, namely, it may invoke peptic ulcer formation because of the loss to the duodenum of the important alkaline pancreatic secretions.

Summary

1. A plan of therapy for chronic pancreatitis is presented.

2. Biliary surgery, choledochojunostomy en Roux Y, and cystenterostomy or cystgastrostomy have proved to be very successful for the early stages of the disease. The patients subjected to these procedures must be carefully selected if good results are to be obtained.

3. We have gained control of the attacks in 50 per cent of the patients subjected to biliary tract surgery alone, and for the group requiring

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LIGAMENTOUS INJURIES TO THE CERVICAL SPINE

KENTON D. LEATHERMAN, M.D.*, K. ARMAND FISCHER, M.D.*
and ALLEN ZOELLER, M.D.

Louisville

IN CONSIDERING ligamentous injuries to the cervical spine one must note that these injuries vary in degree from complete avulsion of all ligamentous structures to the mildest sprain with minimal symptoms.

When an apparent irresistible force meets an almost immovable object something has to give. In many instance of crash landings, automobile collisions, high diving into shallow water, or plain somersaulting, ligamentous structures receive the force of the impact and fracture of the fibro-cartilagenous tissue results.

A study of such conditions can only be made by considering the forces involved, the symptoms and findings present, and an evaluation of any change in normal bony relation as determined by X-ray studies. Post-mortem pathological studies are scant and most such injuries are not fatal.

Symptoms

When a patient gives the history of an automobile collision he usually states that he was dazed or shocked at the time of the accident, and can not remember all the details of the trauma. Many patients will state that they had no particular pain immediately following the collision, and they think they are not hurt, but merely shaken up in the accident.

However, within a period of hours a group of complaints develop which are commonly pain in the back of the head, and pain and limited motion in the cervical spine with or without radiation into the shoulders and upper ex-

*University of Louisville School of Medicine.

trémities. The patients complain of headaches, dizziness and frequently an associated low back pain with limited motion. Many patients are apprehensive and show emotional strain and some complain of inability to concentrate or remember details of recent past events.

Physical Examination

Physical examination of such patients usually shows limitation of motion in flexion, exten-



Plate 1

A.P. X-ray of cervical spine showing Wry neck deformity secondary to muscle spasm.

sion, rotation and lateral bending. Muscle spasm is present and there is muscle guarding

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more than biliary tract surgery, choledochojunostomy has been successful in 80 per cent of the cases.

4. We have encountered no satisfactory procedure for control of the disease in the "burning out" or "burned out" state. Caudal pancreaticojejunostomy may salvage a few patients. Pancreaticoduodenectomy may prove to be the only procedure permitting relief in this stage of the disease.

5. While the results are not perfect, pessimism should not unduly reign and cause no surgical effort to be made.

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with attempts to passively manipulate the cervical spine. There may or may not be a wry neck deformity (Plate 1). Patients complain of tenderness with pressure over the cervical spinous processes. Tenderness over the sterno-cleido



Plate 2

Lateral X-ray view of cervical spine showing loss of normal curve secondary to muscle spasm.

mastoid muscles and posterior muscle areas may be found. There is usually no impairment in motions in the arms and no reflex changes in the upper extremities. There is likewise no nerve or circulatory impairment in the upper extremities. Many times cervical muscle spasm is so severe that satisfactory x-ray films cannot be made upon the initial examination. Routine X-ray studies are made of the cervical spine to rule out evidence of bone disease or trauma, and to show any abnormalities in soft tissue structures and bone relationship.

X-ray Examination

Complete cervical spine studies include anteroposterior, lateral and oblique views, an open mouth picture to show the relationship of the first and second cervical vertebrae and lateral views of the cervical spine in complete flexion and extension. Even though a routine study of this proportion is rather expensive, the omission of one particular film may lead to the diagnosis being missed. Anteroposterior views may show lateral subluxation in the articular facets, lateral views may show a flattening of the normal cervical spine curvature (Plate 2), indicative of muscle spasm; however, the absence of this straight or so called poker spine

is not proof positive that there is no muscle spasm. A paradoxical situation arises in which extreme muscle spasm may increase the normal cervical spine curvature as a tight bow string would increase the curve of a bow. Probably the most important films are lateral views made with the cervical spine in complete flexion and extension. These films will frequently disclose a subluxation or partial dislocation, or a slipping forward of one of the vertebral bodies due to a stretching or tearing of posterior longitudinal ligaments or other ligamentous structures related to the anatomical part of the posterior arch of the spine (Plate 3 & 4). These changes cannot be demonstrated in any of the other views. Repeated X-ray film studies are advised over a period of many months to note any subsequent changes in the curve, bony structures and the associated soft tissues, and to compare with previous films.

Pathological and Physiological Changes

As most of these cases are not fatal, few pathological studies and reports have been made on this condition. However, it is generally accepted that in such an injury with tearing and stretching of musculo-tendinous structures subsequent hemorrhage and swelling develop. Nerve root fibers are readily subject to injury. Tearing of the small apophyseal joint capsular structures occurs and there is stretching and



Plate 3

Lateral X-ray view of cervical spine in flexed position showing subluxation of C-5 on C-6 due to ligamentous injury.

compression of nerve roots as they pass out of the spinal canal through the small foraminae.

With supporting soft tissue structures lost, subluxation and dislocation are not uncommon.



Plate 4

Same Patient as Plate 3 after treatment. Lateral X-ray of cervical spine in flexion.

Muscle spasm of the associated muscular structure develops. Muscle spasm in any part of the body is not without pain. The healing process in this type of pathological condition is slow, just as it is in ligamentous injuries in any part of the body. Ligaments are notoriously poor in blood supply, and it is only through revascularization and scar formation that such ligaments may be restored to normal in the course of time. Healing does occur through fibrosis and thickening of the involved structures and scar formation is an inevitable sequela. Such tissue may then show calcification and become a part of a traumatic arthritic condition. As the nerve supply to the upper extremities originates in the cervical spine region, it is not uncommon to note inflammatory reactions around the cervical and brachial plexuses, causing referred pain into the shoulder, arm, forearm and fingers. Considering the mechanics of the human skeleton, and noting the mobility in the cervi-

cal spine, it is easy to understand the slow, difficult and prolonged healing processes in such injuries, where every little movement of the head or the cervical spine pulls and stretches scar tissue and disturbs healing processes.

The mechanism of the frequently associated headaches is not clearly understood. It is generally felt to be a referred type of pain, extending into the base of the skull secondary to muscle spasm and muscle tension in the cervical spine region. Emotional and nervous symptoms in relation to cervical spine injuries, are commonly present.

Treatment

The treatment of this condition varies, depending upon the severity of the injury and the extent of soft tissue involvement. In those cases of less severity, usually application of heat to the painful areas of the spine, adequate rest on a flat pillow, and guarded physical activity may give the desired relief of symptoms and allow adequate healing in due time. In the more severe cases where there is demonstrable ligamentous separation and bone subluxation, head halter traction with 4 or 5 pounds weight for a period of several weeks, and application of a cervical spine brace frequently is necessary. Braces are frequently used for a period of 3-6 months, and activity guarded for a period of another 6 months.

Conclusion

Cervical spine injuries are very common. This is a painful condition causing considerable cervical spine disability with frequently few positive physical findings to corroborate the patient's complaints. Because of the nature of this lesion, with tearing of ligamentous structures and avulsion of musculo-tendinous attachments, healing is slow and disability is prolonged. Careful and special X-ray studies are essential in establishing a diagnosis of this condition. Treatment depends upon the severity of the lesion and mistreatment frequently prolongs the patient's disability for a period of many months or years.

CONVULSIONS DURING ANESTHESIA*

ROBERT PATRICK BERGNER, M.D.

CONVULSIVE movements may be seen under any form of anesthesia. All of the inhalation, local and topical anesthetic agents have been associated with true convulsions^{1,2,3,4,5,6,7,8}. Seizures resembling convulsions may be seen during induction of and recovery from barbiturate anesthesia, as well as during the onset of action of some of the muscle-relaxing drugs.

What is the significance of a convulsion during anesthesia? A convulsion is an external manifestation of grave and potentially fatal cerebral toxicity. The treatment must be immediate and vigorous, and must be directed towards both the elimination of the cause and the prevention of the effects of the convulsion. The spasms may so interfere with respiration and circulation that death or complications of anoxia may follow. The convulsions must be suppressed, and the patient must be well oxygenated until the cause has been ascertained and the treatment has become effective.

What type of patient is most likely to convulse during anesthesia? Children seem more susceptible than adults, perhaps due to a "convulsive diathesis," and perhaps because many pediatric anesthetic techniques involve some degree of oxygen-want, carbon dioxide excess, and acidosis.

The toxic or febrile patient of any age is another in whom anesthetic convulsions should be feared. This patient is already acidotic and his oxygen requirements may be elevated.

Patients with central nervous system disease or damage must be approached with caution. The alcoholic, the epileptic, the eclamptic, and the uremic patient may convulse at any time, as may also those patients with autonomic nervous system imbalance, alkalosis, carotid sinus syndrome, hyperinsulinism and many other miscellaneous conditions.⁹

One or more of several factors are always associated with an anesthetic convulsion. These are cerebral irritability, hypoxia, and acidosis. Each or all may be present preoperatively. Each or all may be produced by the anesthetic or surgical approach. Vinethene® and the local anesthetic drugs can directly increase cerebral irritability. Certain anesthetic mixtures and awkward surgical positions may produce oxy-

gen-want and carbon dioxide retention. The powerful general anesthetic agents, especially the vapors (ether, Vinethene, chloroform, etc.) can produce a varying degree of metabolic acidosis.

The Effects of Anesthetic Agents

The anesthetic vapors are most often responsible for convulsions seen during inhalation anesthesia. Vinethene (divinyl ether) seems to have convulsive properties of its own, especially in the deep planes of anesthesia. These properties are enhanced if other predisposing factors are present. Rapid blinking of the eyelids sometimes precedes the convulsion and is a valuable warning sign. Vinethene convulsions are usually brief and harmless if artificial respiration with oxygen is instituted immediately and the development of cyanosis prevented.

CASE REPORTS: (1) Two-year-old white male for inguinal hernia repair; history of skull fracture and of febrile convulsions (not elicited preoperatively); generalized convulsions after 30 seconds of open drop Vinethene; artificial respiration with oxygen until awake and breathing normally; reinduced with open drop ether and oxygen; course uneventful.

(2) One-year-old white male; cystostomy for urinary retention; elevated NPN; very slow induction with open drop Vinethene and oxygen; rapid blinking of eyelids after two minutes, followed by a generalized convulsion and apnea; artificial respiration with oxygen until awake and breathing normally; reinduced with cyclopropane and oxygen; uneventful course.

(3) Four-year-old, screaming unpremedicated male; laceration of forehead; hurried induction of anesthesia with open drop Vinethene; several deep gasps while crying; rapid blinking of eyelids, followed immediately by brief generalized convulsion; artificial respiration with oxygen until awake and breathing normally; reinduced with open drop ether and oxygen; uneventful course.

If cyanosis should develop or if return to consciousness is delayed more than a few minutes, the operation should be cancelled. The child can be returned to the operating room at a later day after being well-premedicated with sodium phenobarbital or rectal pentothal.

*Presented at KSMA Annual Meeting 1956.

"Ether Convulsions" are the classical convulsions seen under general anesthesia. They typically occur in toxic, febrile patients in the deeper planes of anesthesia after surgery has progressed for half an hour or more. They are more common if there is surgical or anesthetic interference with respiratory exchange. The etiologic factors are acidosis (metabolic or respiratory or both) and/or hypoxia. The treatment is immediate termination of anesthesia and hyperventilation with oxygen. After a minute or so, if the convulsion persists, 100-200 mgm of a barbiturate can be injected intravenously, and repeated every few minutes as necessary. If the patient has been febrile, he should be cooled with ice bags, ice water enemata, and a fan blowing under the drapes. In well-trained hands curarization and endotracheal intubation may be used while the surgery is hurriedly completed.

Prevention is even more important than treatment. The toxic or febrile patient should be cooled, hydrated, and sedated with a barbiturate before he receives ether. Anesthesia should be light and should include a marked excess of oxygen. Respiratory excursions should be full and deep at all times.

CASE REPORTS: (1) Five-year-old white female; ruptured appendix; temperature 104° (rectal); premedicated with two grains of sodium phenobarbital; intravenous fluids administered; slow induction with open drop Vine-thene, ether, and oxygen; placed on ice bags immediately after induction; operation uneventful for 45 minutes; child then deepened for closure of peritoneum; fasciculations appeared around eyes and mouth; hands began to twitch; immediate hyperventilation with oxygen via bag and mask; twitching disappeared after five minutes; uneventful course.

(2) Thirty-two-year-old obese female; temperature 103° F; empyema of gall bladder; anesthesia induced with sodium pentothal, nitrous oxide, and oxygen, and maintained with endotracheal ether and oxygen; operation uneventful for 35 minutes; severe generalized convulsions suddenly appeared during deep surgical anesthesia; convulsions subsided, but incompletely, when anesthesia discontinued and patient hyperventilated with oxygen; operation completed under curare and oxygen; patient awake half hour after surgery; uneventful post-operative course.

(3) Twelve-year-old thin white female for

left nephrectomy; left hydronephrosis and destroyed kidney; anesthesia induced with Vine-thene and oxygen; light surgical anesthesia maintained with ether and oxygen insufflated through an oral airway; excessive elevation of kidney rest with compression of right chest; after 30 minutes, twitchings appeared around eyes, mouth, and shoulders; kidney rest lowered somewhat and twitchings disappeared; after five minutes, kidney rest elevated again (experimentally), and twitchings reappeared in a few minutes; kidney rest then lowered and left down; twitchings subsided; uneventful course.

Cases (1) and (2) are typical "ether convulsions" in toxic febrile patients. Case (3) is an excellent example of a "carbon dioxide convulsion," with inadequate ventilation as the primary cause, and with ether anesthesia and mild uremia acting as predisposing factors.

Infants will frequently exhibit clonic movements of the extremities during very light ether anesthesia. These movements may exactly resemble some of those seen during febrile convulsions, but are apparently benign. It is important to differentiate them from the true "ether convulsions." The benign clonic movements are seen only in very light anesthesia in infants and small children. They disappear if the anesthesia is deepened. When seen during recovery, they disappear when consciousness is regained. They are more common in chilly operating rooms and with lowered body temperatures. They bear no relation to oxygenation or carbon dioxide elimination. They are confined to the extremities and never involve the face. There is no associated interference with respiration. They are significant only in that they must be differentiated from true convulsions.

Trichlorethylene (Trilene®, Trimar®), when used to produce analgesia or amnesia, is apparently free of the danger of convulsions if oxygen-want and carbon dioxide excess are avoided. If surgical anesthesia is produced, the drug should be expected to have the same convulsive potentialities of the other anesthetic vapors.

Convulsions have been reported in infants when trichlorethylene was administered with nitrous oxide and oxygen through a non-rebreathing system, and it has been recommended that the technique be avoided in this age group.¹⁰

Chloroform and Ethyl Chloride have not

been frequently associated with anesthetic convulsions. Chloroform is contraindicated in the toxic or dehydrated patient, and ethyl chloride is seldom used for long periods or to produce deep anesthesia. Both drugs are, therefore, usually avoided in situations in which anesthetic convulsions are most likely to occur. Both, however, if used indiscriminately are quite capable of exactly reproducing the so-called "ether convulsions."

Nitrous Oxide and Ethylene—the weak anesthetic gases—have no convulsive properties of their own. They do not affect metabolism or respiration, and cannot produce a metabolic or respiratory acidosis. If used without carbon dioxide absorption, or with less than 20% oxygen, both carbon dioxide and hypoxic convulsions may be seen.

These gases are weak agents, however, and may produce just enough cortical depression to allow the lower brain centers to act unchecked. The patient, particularly if an alcoholic, may writhe and shudder, and present movements that resemble convulsions.

Cyclopropane anesthesia sometimes presents brief, mild convulsive episodes during induction in healthy children and adults. These episodes are not associated with depressed respiration, and the cause has not been determined. The convulsions disappear spontaneously if the anesthesia is discontinued for a few moments. In our experience, reinduction with cyclopropane has been uneventful.

In deeper planes of cyclopropane anesthesia, convulsions resembling "ether convulsions" may be seen in febrile or toxic patients, but not nearly as often as with ether. The treatment is the same as for an "ether convulsion."

The convulsions occurring during local and topical anesthesia are a manifestation of the cortical stimulation seen with moderate overdose of the drugs used. Treatment should be planned beforehand and all materials should be available before the convulsion occurs. Administration of oxygen should be begun immediately. 100-200 mgm of a barbiturate should be injected intravenously every thirty seconds until the convulsions are controlled sufficiently to allow the patient to breathe. Should the convulsions progress to collapse, 25-50 mgm of ephedrine sulfate may be injected intravenously to support the circulation, and artificial respiration with oxygen should be instituted. The convulsions are ordinarily

short-lived, but very rarely may continue to recur as the effects of the intravenous barbiturate wear off. In these instances, an intravenous drip of sodium pentothal or sodium Amytal® may be used with a drop rate sufficient to control the convulsions while still allowing the patient to breathe.

Although *barbiturates* are used to prevent and to treat convulsions, the protection they afford is not always absolute. Their use preoperatively or during induction of anesthesia does not preclude the possibility of an anesthetic convulsion. On rare occasions, a slow induction with barbiturates may actually precipitate an epileptic attack if the seizures are those that occur only during the "first stage of sleep."¹¹ The convulsion usually subsides as the full effect of the barbiturates are realized. Convulsions may occur again during recovery, and this type of patient should be watched carefully until full consciousness has returned. This type of patient may, of course, convulse during induction of, and recovery from any form of general anesthesia.

Succinylcholine (Anectine®) and *Decamethonium* (Sincurine®) are synthetic curare-like preparations that produce muscular relaxation by depolarizing motor end plates. In the presence of inadequate general anesthesia, severe generalized muscular twitchings may be seen during the process of depolarization. These are not true convulsions. They indicate that the relaxant drugs have reached their site of action and that muscular paralysis will follow in a moment.

Summary

Convulsions and convulsive-like phenomena may be seen during the administration of any of the anesthetic agents in use today. The effects of the various anesthetic drugs have been discussed.

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REHABILITATION AND MEDICINE*

REX O. McMORRIS, M.D.**

Louisville

THE medical profession has recognized the need of total rehabilitation services for the physically handicapped for many years. The unavailability, the cost, or worse yet, the inaccessibility through lack of integration of the various disciplines involved have handicapped the busy practitioner in application of a total rehabilitation program. Last, but not least, the need for more physicians trained in evaluation of rehabilitation potentials of the acutely or chronically ill is prevalent.

There has been a slowly growing public recognition of the need for total rehabilitation of the injured and disabled. A sudden increase of disabled people as a result of World War II, the increasing accident rate, and the relatively continuous flow of diseases and disabilities such as multiple sclerosis, muscular dystrophy, cerebral palsy, etc., has attracted great public interest. Fund raising drives and literature written for lay consumption has provided the public much information concerning "Rehabilitation."

"Rehabilitation" is a catchy word and is quickly taken up by the lay public. An illustration of the adaptability of this term is its use in speaking of rehabilitating land, houses, and many other animate and inanimate objects. It is a term used very loosely by many groups including the medical profession. In its use in reference to the subject to be considered at this time, one should qualify it as rehabilitation of the physically handicapped.

Rehabilitation Defined

Rehabilitation of the physically handicapped can be defined as that process by which a disabled person is restored to as near normal physical, mental, social, and vocational status as is commensurate with his remaining abilities. Dr. F. A. Whitehouse has defined rehabilitation as being "the cultivation, restoration and conservation of human resources."⁵ This, of course, is a more inclusive definition and one can consider it as being far in advance of our present-day thinking or ability in most existing rehabilitation programs. It implies habilitation of the young, restoration of the adult to a new

or back to his old status in society, and conservation of remaining skills and abilities in the aged.

The rehabilitation of the injured or disabled person has been called the third phase of medicine.⁴ This term fosters the erroneous impression that rehabilitation is a separate procedure in the total treatment of disease or injury. It may indicate to some that rehabilitation measures should be put into effect at a particular point in the patient's recovery. It should be remembered that rehabilitation starts the moment the physician or surgeon begins applying curative measures. The practicing physician must always think of the end results of medical or surgical treatment. As a result, new skills learned in the physical restoration of the patient must be applied from the day the patient becomes acutely ill. As an illustration, in the management of the acutely ill patient, the bed position must be thought of to prevent contractures and to enhance early activity. Muscles and joints must be kept in as good functional state as possible. Many physical procedures to keep the body in good physiological condition during recovery from an acute illness are in use today in modern treatment of disease. In addition, vocational and social services should be utilized during the acute phase or very early convalescent phase when indicated.

The short-term patient with minimal or completely resolving disabilities, who has a job or adequate place in society to return to has little or no need for ancillary services. As the severity or chronicity of the disease or injury increases, the demands for more services usually increase. These cases will require frequent re-evaluations of their total program and follow-up studies. Ancillary services will be in need until medicine has found the specific treatment for all chronic and disabling disease.³ As shown in recent surveys, many of the chronically ill patients who are kept in the hospital, out of medical necessity ordinarily do not receive the treatment that is necessary for the successive stages of rehabilitation to be productive. This fact, coupled with an increasing incidence of traumatic injury and an aging population, points up the ever-increasing need of rehabilitation facilities and/or programs. A

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**Chairman, Department of Physical Medicine & Rehabilitation, University of Louisville.

leading insurance company found that, despite excellent surgery and apparent favorable progress during hospitalization, a large group of permanent totally or permanent partially disabled people often lapsed into a state of long-term chronic disability. They found that these injured workers suffered from residual atrophy or stiffness in the injured part, from discouragement or fear, from lack of counseling or vocational retraining and placement, and many times from as simple a thing as the need for someone to take an interest in them.¹ Dr. Rusk² has pointed out that rehabilitation of the physically handicapped is as necessary economically for the severely handicapped as for those with vocational goals.

Efforts Toward Total Rehabilitation

Rehabilitation of the physically handicapped has been carried on for many, many years in this country by various groups; most of the programs have been limited by placing emphasis on some particular phase or disability. Recently, however, there has been an unprecedented effort to produce a total rehabilitation program. Initially activated in the armed services during World War II and continued by the Veterans Administration; similar new programs and broadened existing programs are being developed by public and private institutions. The public recognition of the needs in this field of endeavor has given great impetus to the latter. Various professions involved in the total rehabilitation program have found it necessary to recruit students, broaden their curricula and attempt to standardize their training to meet the needs of the rehabilitation team. Efforts to intensify the development of facilities, training programs, and personnel are stirring all over the nation. Many of the latter procedures are being developed rapidly under the auspices of the Office of Vocational Rehabilitation. The Congress of the United States has recently appropriated funds for the building of facilities for the training of personnel and buying of equipment for rehabilitation centers. Existing rehabilitation centers have formed a national organization, The Conference of Rehabilitation Centers, and are studying many aspects of facilities and personnel. Are we as physicians keeping pace? There are not enough physicians who can devote full time to the medical direction of these new facilities. We cannot relegate the responsibilities of determinations of physical disabilities to other disciplines. We cannot

ask the occupational and physical therapist to carry out physical restitution procedures without adequate medical supervision. We cannot turn over the direction of a medically oriented program to any other professional group.

In the rehabilitation of the physically handicapped, a team of highly trained professional people is required to apply an intensive program that approaches the individual as a whole. For the physician's part, we are obligated to reduce the patient's physical and mental disabilities to a minimum and enhance his remaining abilities through medical, surgical or psychiatric measures. Our responsibility, however, does not end here. It is becoming increasingly evident that the physician must assume a major role as an integral member and in most instances be the leader of the team in a total rehabilitation program that points toward social and vocational goals, in addition to the usual physical and emotional re-adjustment responsibilities.

Rehabilitation Centers

Rarely is community agency integration such that the private physician can work closely with the social worker, vocational counselor, placement bureau or other of the various agencies indicated as necessary in the total care of his patient. The spread of required services from these agencies is necessarily dependent on the existing disabilities. In attaining the ideal objective of replacement of the handicapped individual back into society in the best social, vocational and economic condition possible, concentration of the required services in a specific area in the community is the most convenient and sometimes the only method of achievement. These areas of integration are commonly called rehabilitation centers.

A rehabilitation center has been defined as a facility in which there is a concentration of services including at least one each from the medical, psycho-social, and vocational areas which are furnished according to need, are intensive and substantial in nature, and which are integrated with each other and with other services in the community to provide unified evaluation and rehabilitation service to disabled people.

Medical Direction of Rehabilitation

When a rehabilitation center is set up with a program designed to service the physically handicapped, that program will necessarily have to have medical direction. Who will be

responsible for these programs? Any physician with adequate training in neurology, rheumatology, orthopedics, psychiatry, physical medicine and occupational medicine is qualified. One specialty in the field of medicine has been particularly trained to supervise such programs—the specialist in physical medicine and rehabilitation. The physician so trained is called a physiatrist and must have postgraduate training in all the above mentioned fields before he can qualify for board certification. This specialty is primarily a service specialty offering consultative and supervisory services to all other physicians, whether specialists or general practitioners. There are not enough physicians trained in the specialty to answer the present demands without considering the future need of medical direction in the many new facilities that are being fostered. This condition exists in spite of over 200 A.M.A. approved residencies being offered in the United States.

The physician involved in the direction of a total rehabilitation program, as practiced in a well-organized rehabilitation center, is fortunate in that he gets to know the patient well and learns how to function with a team of individuals from various fields. The information brought to the panel table by the social worker, psychologist, speech therapist, occupational therapist, rehabilitation nurse, and vocational counselor—those people involved directly with the patient on a eight-hour basis every day, is a very valuable contribution to the medical information concerning the patient, his family, his social status, his vocational background, and other aspects. The physician becomes better acquainted with an individual's performance, his achievements, and his reactions to treatments because of the close association and personal supervision in his program. There is great gratification in the direction of a program that leads the disabled to new achievements. The patient may progress from an antisocial burden to a useful member of society. He may learn new physical abilities that increase his independence. He may learn methods of meeting his problems with less psychological stress. New vocational abilities may be brought to light.

In this field of practice one has an opportunity to coordinate and correlate all medical specialties in the total treatment of the patient during a typical rehabilitation program. The program necessarily demands the services of many specialties because the major portion of

the basic problems are neurological, orthopedic, or rheumatological in nature. There are varying degrees of psychological problems superimposed on these conditions as well as some needing extended psychiatric care. I wish to emphasize that the physician, regardless of his medical specialty, who is involved in the medical direction of such a program is an indispensable member of the rehabilitation team in every case. Many times the medical care is not the most important part of this patient's total rehabilitation but is always an integral part.

The rehabilitation center should be considered a unit of the community health facilities and a part of the armamentarium of the medical social welfare of that community. As such, the center should be fostered and supported by the community at large but with no control of admissions or medical practice within the center. The medical practice and policies must necessarily be controlled by the medical director and his medical advisory group. The need for rehabilitation center operation in close conjunction with a medical school and teaching hospital is locally and nationally recognized. Cooperating with other medical services in utilization of consultative services, treatment, and training facilities are among the major advantages. Herein lies a real opportunity for local medical societies to participate in a truly significant community project. Herein lies an opportunity for the individual physician to obtain a complete, medically supervised program for those patients for whom it is indicated.

Summary

An effort has been made to point out the role of the physician in the total rehabilitation of the physically handicapped. Some of the forces behind a constantly changing approach to this problem have been cited. The scope of a modern rehabilitation center and the services offered the field of medicine have been briefly shown. An aging population and an increasing number of those disabled by disease and trauma (estimated at present at two million persons) represents a challenge to medicine in rehabilitation of the physically handicapped.

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THE SURGERY OF PERIPHERAL ARTERIOSCLEROTIC OCCLUSIVE DISEASE*

J. HERMAN MAHAFFEY, M.D.

Louisville

Peripheral arteriosclerotic occlusive disease in the past has inevitably led to loss of the limb. This is no longer true. The development of new surgical approaches^{1,2,4,6-9,12}, within recent years in the treatment of peripheral arteriosclerotic occlusive disease has made it possible to salvage, in a great number of instances, extremities that would otherwise have been lost. This makes it mandatory that a more careful appraisal of the clinical manifestations of this disease be made, particularly as it affects the lower extremities. The diagnosis is dependent upon the recognition of a specific group of symptoms (Fig. 1). A rather accurate

the occlusion, decrease in the cutaneous temperature, postural color changes, delay in the venous filling, trophic changes of the digits, and ulceration or gangrene of the digitis, may be noted on examination. Absence of the femoral pulse and those distal to it does not necessarily reflect the severity of the arteriosclerotic process. A patient with an iliac artery occlusion may have only intermittent claudication without any trophic or postural color changes in the feet whereas another individual with the level of occlusion in the lower superficial femoral artery or in the popliteal artery may have marked ischemic changes in the feet and even ulceration or gangrene of the digits. It is unusual to find gangrene of the digits when the level of occlusion is confined to the iliac artery although the intermittent claudication may be severe. Even in the absence of distal pulses there may still be a considerable non-pulsatile blood flow in the major vessels distal to the level of occlusion. The popliteal pulse, perhaps the most significant pulse in the lower extremity, is best felt with the patient in the prone position and with the knee flexed. Too much reliance should not be placed upon the absence of the dorsalis pedis pulse alone for it has been found to be absent or in an abnormal position in 10 to 14 per cent of young adults without evidence of peripheral artery disease.¹⁰ More significant is the absence of both pedal pulses in a foot or the impairment in the pedal pulses in one foot in comparison with those in the other.

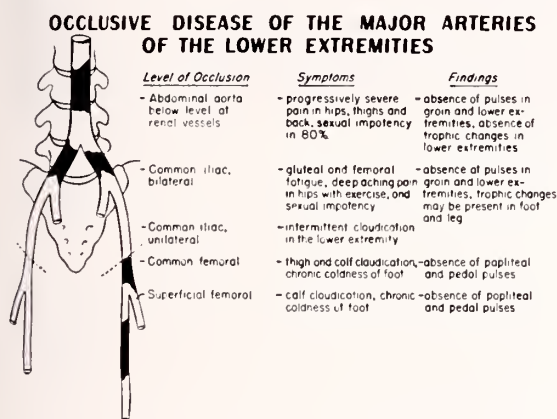


Figure 1.

estimate of the level of occlusion and of the degree of arterial insufficiency may be made from the clinical manifestations.

Diagnosis

Intermittent claudication, rest pain, coldness of the extremities, paresthesia, and hypesthesia are symptoms of an inadequate blood flow to the lower extremity. Absence of or diminution of the femoral, popliteal, and pedal pulses depending upon the level and completeness of

From the Department of Surgery, The University of Louisville School of Medicine. Read before the Kentucky Chapter of the American College of Surgeons at the Kentucky State Medical Meeting, at Louisville, Kentucky, September 19, 1956.

The artery homografts used in these cases were obtained from the University of Louisville Artery Bank, established and supported by grants from the Louisville, Kentucky, and Paducah-McCracken County Heart Associations.

Dependent rubor is the result of capillary atony and is indicative of moderate or extreme ischemia. Figure 2A shows the feet of an individual with dependent rubor. Note the distended veins on the dorsum of the feet. Figure 2B shows both feet after the left foot has been elevated for one minute and returned to the floor. It remained quite pale for sixty seconds before rubor reappeared. Pitting edema is present. Edema, although not characteristic of arterial disease, may be present if infection is superimposed, or it may develop after the patient has been sitting for long periods of time with the leg in a dependent position to relieve the pain. This type of edema is referred



Figure 3A. Femoral arteriogram demonstrating a short segmental occlusion of the lower right superficial femoral artery with good collateral circulation and distal refilling of the major vessel present in a 48-year-old woman with calf claudication.



Figure 3B. Femoral arteriogram revealing extensive intimal disease without occlusion of the right superficial femoral artery but with poor collateral circulation.



Figure 3C. Femoral arteriogram showing occlusion of the left superficial femoral artery with scanty collateral circulation and no distal refilling of the major vessel in a 70-year-old man with gangrene developing in the foot.

to as "dependency edema" or "gravitational edema." Such was the case here. Following elevation of the left foot and return to a dependent position, the veins on the dorsum of the left foot were still collapsed thirty seconds later. This delay in venous filling time (normal venous filling time being ten seconds) is further evidence of an insufficient arterial blood flow to the foot. Elevation of both feet produced pallor of the soles of both feet, more marked



Figure 2A. Dependent rubor in an individual with severe occlusive disease of both superficial femoral arteries.
Figure 2B. Marked pallor of the left foot after elevation for one minute. Compare with the rubor of the opposite foot which has not been elevated. Note the dependency edema. Venous filling time of the left foot is markedly increased.

on the right. Despite essentially normal appearing aorta and iliac vessels on the aortogram, the femoral arteriograms revealed severe occlusive disease of both superficial femoral arteries.

Oscillometry and temperature studies on the skin with a thermocouple type instrument offer little that an experienced examiner cannot detect by palpation. Adequate arteriography is essential in an individual who is under consideration for surgery for arterial insufficiency. Information regarding the length of the occlusion, the level of the occlusion, the number of occlusions, the degree of intimal disease, the presence or absence of distal refilling of the major vessels, and the amount of collateral circulation present is obtained from the arteriograms. Distal refilling of the major artery is a pre-requisite for successful resection and grafting, or the by-pass procedure of an occluded segment. Generally speaking, three basic type patterns are noted on the arteriogram: (1) segmental occlusion with good collateral circulation and distal refilling of the major vessels present (Fig. 3A, 4A); (2) extensive intimal disease without occlusion but with poor collateral circulation (Fig. 3B,

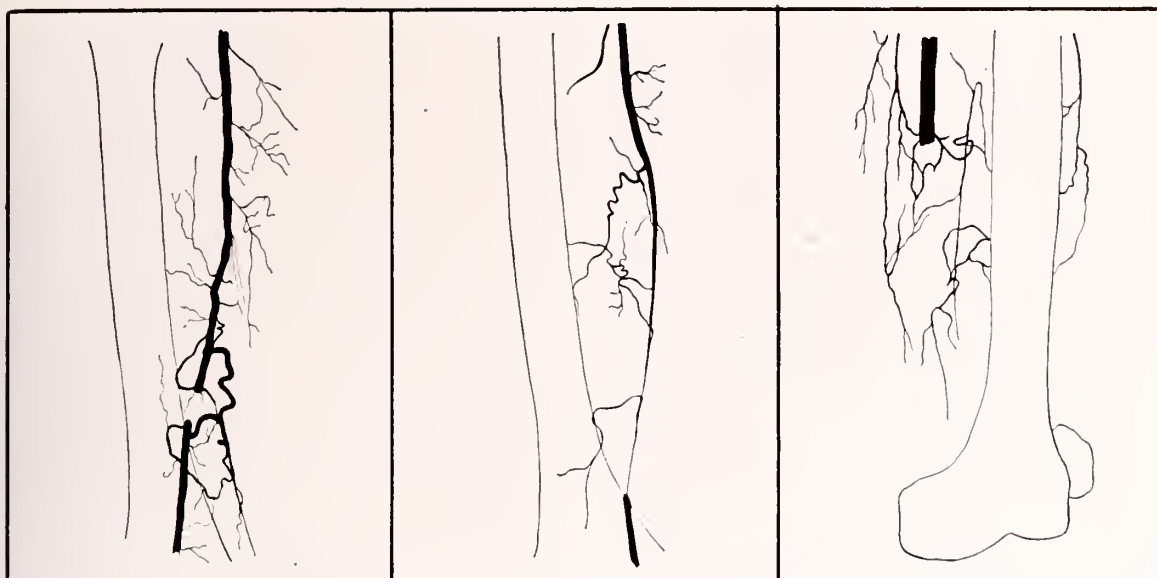


Figure 4A. Drawing of femoral arteriogram (Fig. 3A).

Figure 4B. Drawing of femoral arteriogram (Fig. 3B).

Figure 4C. Drawing of femoral arteriogram (Fig. 3C).

4B); and (3) occlusion with variable collateral circulation present and no distal refilling of the major vessel (Fig. 3C, 4C). Operative popliteal arteriography may be necessary to definitely determine the presence or absence of distal refilling, or the presence of a second occlusion as was the case in a 50 year old male whose complaints were those of intermittent claudication and coldness of the foot. The femoral arteriogram showed a long occlusion of the superficial femoral artery beginning at the level of the common femoral bifurcation with distal refilling of the popliteal artery, but with a suggestion of a block at the popliteal bifurcation. Popliteal arteriography confirmed the presence of such a block. Any grafting procedure in this case would have been doomed to failure because of the poor outflow tract. Followup examination four months after lumbar sympathectomy revealed the man had returned to work, the intermittent claudication had disappeared, and the foot was warm.

The Surgical Approach

The surgical approach to arteriosclerotic occlusive disease of the lower extremities consists of (1) lumbar sympathectomy, (2) thromboendarterectomy, (3) resection of the occluded segment with replacement by an arterial homograft, and (4) by-pass of the thrombosed segment with a graft (Fig. 5).

Lumbar sympathectomy^{3,5} which by interruption of the vasoconstrictor mechanism permits a maximal degree of vasodilatation to a

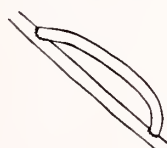
given region, has fallen into disrepute with some. This may be due to their expecting too much from the procedure. Granted that the more widespread use of arteriography will considerably aid in estimating the extent of involvement of the major vessels in the limb, there exists still no accurate means for definite control studies. One would naturally not expect as good a result in an individual with extensive major artery involvement in the thigh without distal refilling of the major vessel as in one with segmental occlusion with distal filling.

Surgical Approach to Arteriosclerotic Occlusive Disease of the Lower Extremities

Sympathectomy (1925)



By-pass procedure (1951)



Resection of occluded segment with replacement by an arterial homograft (1951)



Thrombo-endarterectomy (1947)



Figure 5.

Extreme dryness of the foot when the opposite foot or limb is moist suggests that sympathectomy would be ineffectual. Edema of the limb is considered a contraindication to sympathectomy. Lumbar sympathectomy is a benign procedure as far as mortality or morbidity is concerned. An illustrative case is that of a 64

year old obese woman with resting pain of three to four weeks' duration and patchy red volacious areas of the skin just above the ankle. These areas went on to gangrene. The arteriogram revealed a high occlusion of the superficial femoral artery without distal refilling of the major vessel. The collateral circulation was poor. Operative popliteal arteriography revealed extensive disease of the popliteal artery with an occluded bifurcation. Despite leaning towards amputation initially, lumbar sympathectomy was performed. Now four months later, although the foot is still ischemic and pale, surprisingly the areas of skin necrosis have healed, and she still has her leg and is able to walk on it without limping.

Thrombo-endarterectomy,^{7,12} first described by dos Santos about 1947, is best applied for obstruction in the iliac vessels, and perhaps for short proximal femoral occlusions. Postoperative thrombosis, dissection of the distal intimal flaps by the blood flow, and interference of collateral circulation by the dissection are disadvantages associated with this procedure.

Resection of the occluded segment with replacement by an arterial homograft (first described with replacement by a venous autograft) and the by-pass procedure were applied clinically in 1951^{1, 2, 4, 9}. Restoration of flow through major channels is obtained with both procedures although the by-pass procedure with its end-to-side anastomosis and exposure of only short segments of the vessels at either end has in its favor definitely less interference with the collateral circulation. Recent reports¹¹ are accumulating of occlusion of the by-pass in a significant number of cases twelve to eighteen months later. Whether this is a result of surgical technique, or the development of a new block more proximal, or whether the thrombus in the by-passed segment has gradually propagated proximally to occlude the proximal anastomosis has not yet been definitely ascertained.

Illustrative Cases

The following are three illustrations of the use of thrombo-endarterectomy, resection with homografting and the by-pass procedure. Case #1: This is a 46 year old plumber, five feet, eight and one-half inches tall, weighing 215 pounds, who was admitted to one of the private hospitals in Louisville because of right calf claudication of approximately six months' duration. Except for absence of the right femoral pulse and those distal to it, examination re-

vealed no other abnormalities. At the conclusion of the examination and after he had dressed he walked up and down the corridor for a distance of approximately one hundred yards. At this distance he began to complain of pain in his right calf, and after another twenty or thirty yards, he began to limp. He was taken back into the office and quickly removed his shoes. The toes and sole of his right foot were quite blanched. This diagram (Fig. 6) shows an occlusion of his right external iliac artery at the groin level, a partially occluded right common iliac artery, a block of his profunda femoral artery on the right below the first or second perforating branch, and a small ribbon-

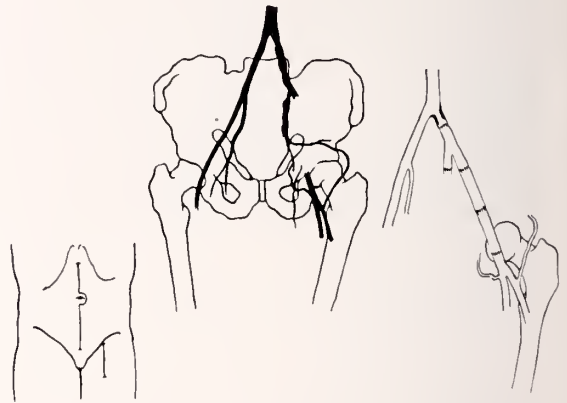


Figure 6. Case No. 1: Occlusion of the right external iliac artery at the groin level, and a partially occluded right common iliac artery treated by thromboendarterectomy of the right common and external iliac arteries, and an artery homograft replacement of the common femoral artery which was damaged beyond repair during the procedure.

like defect in the proximal left superficial femoral artery. The operative procedure was long and fraught with difficulty. Much more intimal disease and thrombosis of the iliac arteries existed than was suggested by the aortogram. An initial by-pass using one of Edward's crimped Nylon prosthesis⁶, from the common femoral artery to the common iliac artery failed largely because of technical difficulties. Ultimately the common and external iliac arteries were thrombo-endarterectomized. The occlusion at the groin level had not been adequately attacked and an attempt to ream this segment out from below upwards with an external vein stripper damaged the common femoral artery beyond repair. Accordingly a homograft was used to replace this segment (Fig. 6). The profunda femoral artery was ligated at its origin without interfering with its branches. Now two months since surgery, both pedal pulses are present and he is ambulating well. The opera-

tive femoral arteriogram revealed a block in the profunda femoral artery and a very patent, relatively disease free superficial femoral artery. Case #2: This 48 year old woman, a clerical worker, was seen in early July this year and was admitted to one of the private hospitals in Louisville with the history that approximately eight weeks previously, after getting off a bus, she developed pain in the right posterior thigh after walking a half block or so. Since that

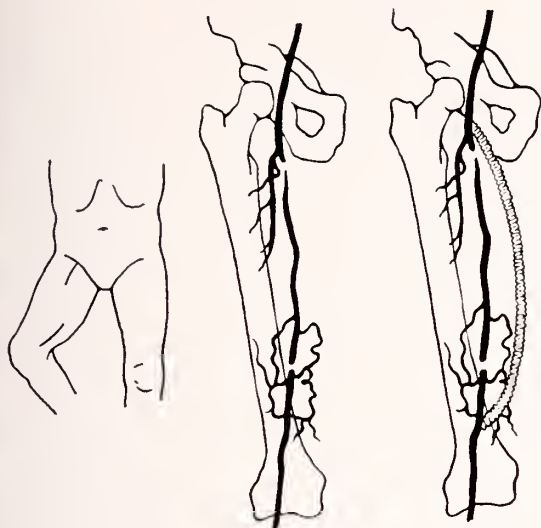


Figure 7. Case No. 2: Two short segmental occlusions of the right superficial femoral artery, one proximally just distal to the common femoral artery, and the other in the lower third of the superficial femoral artery, treated by a by-pass of both occlusions using a crimped Nylon prosthesis (Edward's).

time she has had pain with exercise (walking) that might begin anywhere in the thigh, calf, or ankle. The right popliteal and pedal pulses were absent. Venous filling time was increased to 20-22 seconds. There was pallor of the toes and sole of the right foot with elevation. Despite the presence of a femoral pulse at the inguinal ligament, an incision was necessary to insert the needle and a #16 polyethylene catheter into the artery. A short segmental occlusion in the lower superficial femoral artery was disclosed (Figs. 3A, 4A, 7). At exploration, however, using an incision in the mid-thigh area, the artery proximally was not pulsating so the by-pass procedure was abandoned, and a lumbar sympathectomy was performed instead. Later an aortogram revealed the second but proximal occlusion to be just at the common femoral bifurcation. A by-pass procedure of both blocks using one of Edward's crimped Nylon prosthesis⁶ was done (Fig. 7). Now three months after surgery both pedal pulses are still present and there is no claudication. Case #3: This 55 year old mineworker was admitted

to one of the private hospitals in Louisville on July 27, 1955, with a history of cramping pain in the left calf and thigh, and a discomfort in the left inguinal area and buttock with exercise which was first noticed during the preceding winter. The left femoral, popliteal, and pedal pulses were absent. Blanching of the foot was noted with elevation. Aortography (Fig. 8) revealed complete occlusion of the left external iliac artery and marked narrowing of the internal iliac artery just below the common iliac artery bifurcation. On August 2, 1955, resection of the entire left external iliac artery, and partial resection of the left common iliac, internal iliac, and common femoral arteries was done with restoration of continuity with an arterial homograft (Fig. 8). One year later the left pedal pulses were still present and he was back at work in the coal mines.

Conclusion

In conclusion, it should be emphasized that individuals with peripheral arteriosclerotic occlusive disease have generalized arteriosclerosis. The recently developed surgical approaches are directed towards the areas of segmental occlusion and not to the basic underlying disease process which is generalized. Utilizing these procedures it has been possible to restore blood flow through the major vessels and to salvage in a great number of instances extremities that would otherwise have been lost. Lumbar sympathectomy may be a valuable adjunct in the

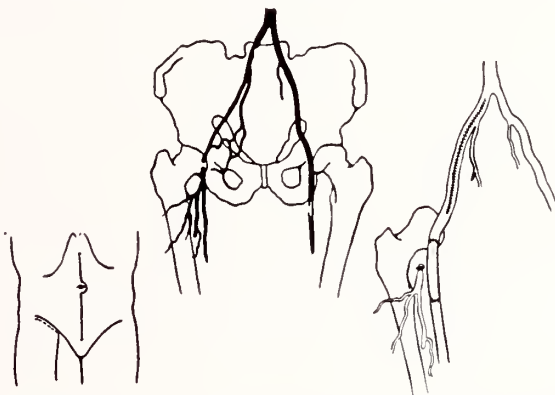


Figure 8. Case No. 3: Complete occlusions of the left external iliac artery and marked narrowing of the internal iliac artery just distal to its origin, treated by resection of the diseased segment and restoration of continuity with insertion of an artery homograft.

treatment of those patients with small artery disease or with such extensive arteriosclerotic involvement that restoration of blood flow through major channels is not possible. A low-

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THE USE OF DERMABRASION IN COSMETIC PROBLEMS*

ULLIN W. LEAVELL, JR., M.D.

Lexington

Introduction

IN 1952 at a meeting of the Dermatological Section, Mt. Sinai Hospital, New York, Kurtin¹ introduced a technique of dermabrasion which has been used since by many others with great success in the management of cosmetic problems. The procedure in general involves freezing the skin with ethyl chloride and then applying a wire brush rotating at 15,000 RPM to the diseased tissue.

There are three features in particular which make this operation attractive. First, it may be done in the office; hospitalization is unnecessary. Second, the operation is carried out under a local anesthetic; the dangers of a general anesthetic are therefore avoided. Third, the use of a freezing agent permits delicate control in a bloodless field.

Robinson² lists the following cosmetic defects which may be treated by dermabrasive surgery:

1. Pitted Scars
 - (a) Small Pox
 - (b) Chicken Pox
 - (c) Acneform Lesions
 - (d) Furuncles
2. Hypertrophic and Deformed Scars

- (a) Post Traumatic
- (b) Acne Kéloid in White Patients
3. Nevi
 - (a) Multiple Intraepidermic Nevi
 - (b) Nevus Flammeus
 - (c) Nevus Unius Lateralis
4. Pigmentation
 - (a) Chloasma
 - (b) Lentigines
5. New Growths
 - (a) Senile and Seborrhic Keratoses
 - (b) Adenoma Sebaceum
 - (c) Verruca
6. Miscellaneous
 - (a) Tattoos
 - (b) Rhinophyma
 - (c) Enlarged Pores
 - (d) Milia

Procedure

Kurtin's procedure³ is as follows: The patient is instructed to have a black and white picture made preoperatively with the lighting placed so that the pits of acne scars will show up best. The picture is valuable for future reference and should be filed with the patient's history. Male patients shave before the operation. The face is washed with soap and water and all cosmetics are removed. Fifty mg. of Demerol®

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*Presented at Meeting of Fayette County Medical Society on November 13, 1956.

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cholesterol low-fat diet, complete abstinence of all forms of tobacco, avoidance of extremes of temperature, and good foot hygiene are essential in the overall management of individuals with peripheral arteriosclerotic occlusive disease.

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are given intramuscularly and the patient's face is prechilled by applying cold packs to the face for about 20 minutes. This reduces the actual pain from freezing with ethyl chloride. The eyes are protected with gauze held firmly in position by the assistant. The nose and mouth are covered with gauze and the nose and ear orifices are plugged with cotton to prevent inadvertent spraying of these areas. The current of air is directed on the area to accelerate evaporation of ethyl chloride and consequent instantaneous freezing of the skin. Ethyl chloride is sprayed in a coarse stream and about three or four square inches are frozen at a time. While the skin is frozen hard the wire brush revolving at 15,000 RPM is applied to the area. The first sign of thawing is softening of the tissue followed by slight bleeding. The centrifugal force of the brush drives abraded material away from the field which keeps the field and instrument free of epithelial debris. This necessitates the wearing of plastic gowns and face masks.

The brush measures 3/4" in diameter and is 3/32 inches thick. It is made of stainless steel wire which is 0.003 inches in diameter. The brush is moved rapidly across the skin at right angles to the plane of the brush. Light pressure is maintained.

Capillary Bleeding

Immediately after abrading there is much capillary bleeding. Gauze strips 4" x 4" are applied to the skin and they are held in place by a towel tied around the head. The patient rests for 20-30 minutes during which time the bleeding decreases. Telfa non-adherent strips are applied directly over the skin. Telfa is an inert plastic film perforated by pores large enough to pass the exudate, but small enough to prevent granulation buds. Over the Telfa is placed gauze and towels to form a bandage that will stay on for 24 hours. The patient is given a prescription for Demerol and instructed to take it every three hours whenever necessary for pain. The next day the bandage is removed and the face allowed to air dry. A towel is draped around the neck to catch any drippings. On the fifth day warm water compresses are applied for 15 minutes three times daily. Boric acid ointment is applied nightly. The crusts will come off in seven to ten days. One may then use bland soap, unmedicated makeup, or a razor for shaving if required. The patient should avoid excessive straining, lifting or bend-

ing, sunlight, extreme cold, extreme heat or strong winds.

Clinical Experience and Improvements

Hubler⁴ has suggested applying 1 per cent gentian violet to show the depth of lesions and the areas treated. Blau and Rein⁵ subjected many patients to dermabrasion during an exacerbation of the acne with excellent healing of the acne process. They believe that the mental status of the patient should be evaluated and that exaggerated claims should be avoided. Fifty to eighty per cent improvement can be expected. The face has numerous pilosebaceous units so there should be no fear of premature drying and wrinkling. Clearly many types of skin lesions may be removed by abrasion. Whether this is accomplished by knife curette desiccator, X-ray, caustic, sandpaper or wire brush is purely an individual preference. If one completely abrades a lesion in the equivalent area and depth that one uses a knife to excise it entirely, one has accomplished the same purpose. When a lesion is removed from the face, no visible scar should result provided the lesion does not descend to the subcutis. The epithelium regenerates from sebaceous glands and ducts and sweat glands and ducts.

LeVan⁶ states that topical medication is unnecessary as the inherent local resistance of the facial skin to infection is adequate in preventing this complication. He introduced Telfa post-operatively to prevent granulation buds from sticking to the dressing. Wilson, Luikhart and Ayers⁷ stressed the advantages of Freon 114 as a refrigerant. It is non-inflammable, not a primary irritant to the skin nor does it cause allergic sensitization; it is adequate for skin planing even without the use of a blower and a flexible shaft between the rotating wire brush and electric motor is not necessary to prevent sparks from exploding the refrigerant. Grais⁸ introduced a polyethylene tubing attached to a rubber BMR mouth piece for patients to breathe through to reduce inhalation of ethyl chloride fumes. LeVan¹¹ has developed a mechanical device which is controlled by a foot pedal and delivers ethyl chloride spray under a stream of compressed air to the site to be treated. This eliminates picking up the ethyl chloride bottles, spraying and placing them back on a shelf. Beirne and Beirne¹² have described an attachment to the skin planing apparatus for the collection of abraded skin particles.

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Complications

As with almost any procedure certain complications occur. In general the procedure has been received well and is gaining rapidly in popularity. Edelstein⁹ lists the following five sequellae that he encountered in his series of forty cases.

1. Persistent erythema. The erythema normally fades in about five to six weeks. He encountered four cases of persistent erythema and thinks that there may be four possible explanations for this: (a) Excessive refrigeration, (b) Overexposure to sunlight prior to complete healing, (c) Overzealous and premature cleaning of the face with soaps or defatting agents, (d) Premature resumption of topical acne treatment.
2. Hyperpigmentation was observed in two cases. In one it disappeared in about three months. In the other it disappeared after use of Benoquin® ointment for three or four weeks. Both were individuals of dark complexion.
3. Milia (Whiteheads). They are most frequent after the second and third planing. It has been suggested by Monash and Rivera¹⁰ that (a) some of the follicles are closed by the abrasive action of the brush or (b) small bits of epithelium may be imbedded in the skin during the procedure. The Milia are easily removed with a scalpel and comedone extractor.

4. Pyoderma. Two cases developed this complication. They were cleared with local medication of compresses and antibiotic ointment.
5. Eczematous reaction occurred in one case. It cleared with local medication.

Edelstein further states that the sequellae were not serious or permanent and that their occurrence should not lead one to forego the electro-surgical planing procedure.

Summary

The procedure of dermabrasion as introduced by Kurtin has been used for the past four years. It has stood the test and has been found to be a valuable aid in the treatment of cosmetic defects of the skin.

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Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires, in the order given: name of author, title of article, name of periodical, with volume, page, month — day of month if weekly — and year. The Journal of the KSMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. If illustrations are submitted with a paper, The Journal will assume the

cost for the first three one-column width half tones. The cost of additional illustrations will be borne by the essayist.

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CASE DISCUSSIONS

From The
University of Louisville Hospitals



PRIMARY TUBERCULOSIS IN INFANCY

Louisville General Hospital

Presentation

G. K.,* a seven-month-old colored male was admitted to Louisville General Hospital on July 17, 1956, with the chief complaint of "positive skin test." He was admitted to remove him from his tuberculosis environment, until a tuberculin survey of the family could be made. A routine tuberculin patch test was found to be positive at a local well baby clinic. For the seven days prior to admission he had a low grade fever, which the mother attributed to teething. Family history revealed that his father had been hospitalized five years previously for pulmonary tuberculosis. For the past four years he had been considered to have "arrested" tuberculosis.

PHYSICAL EXAMINATION: This well developed, well nourished, colored, male was in no distress. Weight 17 lbs. 5½ oz. Temperature 99°. Pulse 92/minute. Respiration 28/minute. Examination of the ears, nose, and throat was not remarkable. Neck was supple. Breath sounds were vesicular. No rales or rhonchi were heard. There was a normal sinus rhythm, without murmurs or enlargement of the heart. The liver and spleen were not palpable. There was no deformity of the genitalia or the extremities. Neurological examination was physiological.

LABORATORY FINDINGS: Routine hematology and urinalysis were within normal limits.

HOSPITAL COURSE: Mantoux test with P.P.D. revealed a 0.5 cm. area of induration. Histoplasmin skin test was negative. Chest X-ray revealed no pulmonary pathology. He was discharged on isoniazid 15 mg/kg/day and para-aminosalicylic acid (P.A.S.), 300 mg/kg/day, following an uneventful hospital course.

FOLLOW UP: Survey of the family revealed his father to have active pulmonary tuberculosis

and he was hospitalized for treatment. His older sister E. K.**, five years of age, was found to have a positive skin test. Her chest X-ray revealed bilateral hilar lymphadenopathy with left lobe infiltration and bilateral parenchymal calcification. She was also begun on isoniazid and para-aminosalicylic acid.

Since that time both children have been followed in the Pediatric Clinic at Louisville General Hospital. Routine follow up X-rays of infant G. K. have been normal. Follow up chest X-rays on E. K. have shown complete clearing of the infiltration in the left lower lobe. Both have been free of symptoms, and are being continued on anti-tuberculosis treatment.

Discussion by W. C. Adams, M.D., Assistant Professor of Child Health.

Primary or "childhood" tuberculosis in 95% of cases results from the inhalation of tubercle bacilli, generally from an adult source. A "primary complex" ensues which includes the site of lung implantation and lymphatic spread to the regional lymphnodes. Public health measures to find and eliminate the source of the infections have long been mandatory, when a child is found to have primary tuberculosis. From a casual look it has appeared to some that there is little reason to treat primary tuberculosis because of the seemingly good prognosis, in school children. Closer examination of the facts will reveal this to be untrue. The younger the child who develops primary tuberculosis the higher the mortality. In children under six months of age with primary tuberculosis, there develops a 70% mortality by the age of two years.

Primary tuberculosis has several important complications, which include progressive primary tuberculosis, tuberculosis meningitis, milary tuberculosis, bone and joint tuberculosis. Malnutrition produces an increase in post primary complications of tuberculosis. Any illness or physical injury, as well as the use of ACTH

*LHG No. 289899

**LHG No. 227088

and cortisone may activate an otherwise dormant primary tuberculosis. Individuals who receive frequent heavy exposures to the virulent tubercle bacilli, as in families with an intimate contact are more likely to receive an overwhelming dose of the organisms. The Negroes, Irish, and Latin-Americans have a greater incidence of tuberculosis. Whether this is due to their environment or a racial difference is difficult to determine. During adolescence, post primary complications are increased producing an increased morbidity and mortality, especially is this true of the females six months before and six months after the menarche.

Once an individual has had primary tuberculosis, he is carrying a "walled off" foci of tubercle bacilli which may break down and produce post primary complications during any period of life. If one could prevent primary tuberculosis, no cases of secondary or "adult" tuberculosis would occur. Individuals with primary tuberculosis are walking reservoirs for chronic contagious pulmonary tuberculosis. Primary tuberculosis itself is considered to be a relatively non-contagious disease.

A positive tuberculin skin test indicates active tuberculosis some time between birth and the performance of that skin test. The conversion of a negative tuberculin skin test or the finding of a positive skin test in a child under two years of age is indicative of active tuberculosis. The finding of a preschool child with a positive tuberculin skin test usually indicates a family contact with active tuberculosis. The family contact may be anyone associated with the patient, as parents, grandparents, baby sitters, visitors, etc. One method of detecting tuberculosis in adults is to find positive skin tests in their child.

In an area such as Kentucky, with a high incidence of tuberculosis, tuberculin skin tests are recommended routinely at six months' intervals up to one year of age, then once yearly. Old tuberculin (O. T.) 1:1000 dilution or purified protein derivative (P.P.D.) intermediate strength (.0001 mg.) may be used for Mantoux skin testing. Both have limited expiration dates. 0.1 cc of either O.T. or P.P.D. is injected intradermally and read at 48 hours. A positive test is one with an area of 5 mm or over in diameter of induration. The Vollmer patch test may be used as a screening test; positive results should be verified with Mantoux testing.

Routine use of the tuberculin skin test has many advantages. It detects primary tuberculosis in the child, and points to the need to seek the adult source of infection. A tuberculin positive child must be followed closely, especially during the first year after conversion of the skin test lest tuberculous meningitis or miliary disease ensue.

The possible complications of primary tuberculosis have been listed and ample evidence advanced to support the need for treatment of the primary lesions. Prior to the development of isoniazid, the antimicrobial agents were relatively ineffective in the prevention of the post primary complications of tuberculosis. Doctors Edith Lincoln and Arthur Robinson have suggested that isoniazid is effective in the prevention of tuberculous meningitis.

The treatment recommended at the present time is isoniazid and para-aminosalicylic acid. Further investigative studies may lead to new ideas in management of primary tuberculosis. The use of the two drugs simultaneously has a twofold reason: 1) increase in effectiveness and, 2) delay in the emergence of drug resistant tubercle bacilli. Para-aminosalicylic acid is more effective than streptomycin in delaying emergence of isoniazid-resistant tubercle bacilli. Streptomycin is recommended in addition to isoniazid and para-aminosalicylic acid for the treatment of the post primary complication. As previously stated, the more effective treatment is begun early. The antimicrobial agents are most effective against the active multiplying phase of the tubercle bacilli.

The disadvantages of treatment of primary tuberculosis with isoniazid include:

- 1) The development of drug resistant strains of tubercle bacilli may occur. This is rarely a factor in children. Increasing evidence reveals that with increasing resistance to isoniazid, there is a decreased virulence of the tubercle bacilli.

- 2) Polyneuritis described as occurring in adults following isoniazid therapy does not occur in children. Its occurrence can be prevented by the use of pyridoxin 10-40 mg/day. Isoniazid has been reported to enhance the development of convulsions. Dilantin and phenobarbital are recommended in patients with histories of convulsions.

Current concepts of therapy include the treatment of children three to six years old with

(Continued on Page 553)



SPECIAL ARTICLES



A BRIEF HISTORY OF KENTUCKY PHYSICIANS MUTUAL, INC.*

OSCAR O. MILLER, M.D.

IT is a privilege to recount briefly the history of the development of Kentucky Physicians Mutual, Incorporated, or prepaid medical care as we have it today; by that I mean the plan sponsored by the Kentucky State Medical Association.

How short is the memory of man; a crisis passed is soon forgotten. We have a younger generation of physicians who have no experience of the threat of state medicine in America that began after the socialization of the medical profession in England in 1911 and culminated in this country in the iniquitous Murray, Wagner and Dingle Bill—Senate Bill 1161—introduced in the Senate of the United States in June, 1943. Again as Senate Bill 1050, May 24, 1945, and again Senate Bill 5, January 5, 1949, for the total destruction of free enterprise these bills were unsurpassed. They contained all the provisions for the complete subjugation of the medical and dental professions as well as the deterioration of the art and science of the professional care of the sick. It was class legislation of the most vicious type, totalitarian in concept and operation.

Idea Not New

This idea of sickness insurance was nothing new. From 1910 to 1916 there was extensive propaganda for sickness insurance; the American Medical Association investigated the matter thoroughly and gave its verdict in 1920. From then on little was heard of compulsory sickness insurance, until the industrial debacle in 1929 and the depression that followed. The medical profession realized the emergency and launched itself on the most extensive experimenting with plans to provide good medical care which could be met by all classes.

By January, 1945, twenty-eight states had

*Presented at County Society Officers Conference at Lexington on April 4, 1957

enacted enabling legislation for non-profit voluntary hospital insurance and fourteen states had similar legislation covering provisions for voluntary non-profit prepayment medical care plans. Stimulated by the Michigan Medical Service, which was organized in 1939 by the Michigan State Medical Society, I, as president of the Kentucky State Medical Association, called a meeting, February 18, 1945, of representative members of the profession, including past presidents, committee chairmen, members of the Council and staff of the University of Louisville, and other interested persons, for consideration of problems of medical care as related to the overall needs of the people of Kentucky. As a result of that meeting, the Council was requested to appoint a Committee to study prepayment plans in other states and to prepare an enabling act to be presented to the General Assembly for the development of a prepayment medical care plan for Kentucky. Such an enabling act was drawn and passed by the Kentucky Senate March 20, 1946.

Request to County Societies

In the meantime, the Committee, headed by the president of the Kentucky State Medical Association, wrote each county medical society, requesting that a Committee be appointed in each society to cooperate in a plan for prepaid medical care; and the councilor in each district was urged to be responsible for his district as a whole.

On September 1, 1946 the Committee and a representative group had a specially-called meeting to hear Ed J. McCormick, M.D., chairman of the Council on Medical Service of the American Medical Association, and Mr. Jay Ketchum, executive director of the Michigan Medical Service, who had been most helpful in meeting with the Committee on several occasions and advising with us by mail. This meet-

ing was most fruitful in further indoctrinating the group in the necessity of a prepayment plan.

On January 26, 1947 we were most fortunate in having Mr. Frank Smith, Chicago, who was associated with the Council on Medical Service of the American Medical Association and who was well versed in the insurance field, particularly prepayment medical care. As a result of his guidance our plans rapidly crystalized. He warned us against any precipitate action and advised us to go slowly and institute a thorough educational campaign among the profession. In compliance with this sound advice, the chairman and other members of the Committee, including the secretary of the Association, Philip E. Blackerby, M.D., visited most if not all councillor districts and local medical societies and propounded the need for voluntary prepaid non-profit medical care.

As you may well believe, there was some vociferous opposition in certain quarters and some organized obstructive tactics developed which fortunately neither embarrassed nor hindered the committee.

Work and Sacrifice Involved

It should be borne in mind that the original and sole purpose of the Committee was to furnish prepaid medical care to the low income group in the form of a service plan which to the uninitiated means that the physician agreed to accept the amount specified for certain procedures in full. Such a plan required, according to the enabling act, that 51 per cent of the regularly licensed physicians practicing in a county must sign an agreement to provide such services before it could be sold in each county. This imposed considerable work on the committee but the groundwork had been laid by the educational campaign and 51 per cent of the physicians signed the agreement to cooperate. This meant a potential sacrifice on their part, for the agreement provided that they would accept in any one month a pro rata of the sums due them if there were insufficient funds in the treasury. Such a provision kept the plan financially sound.

In the meantime legal council had been employed, articles of incorporation filed, constitution and bylaws drawn up, contracts prepared, and a list of procedures and the amount paid for each was incorporated in the contracts. The committee felt that they were now ready to present the completed plan to the House of

Delegates of the Kentucky Medical Association, the elected representatives of the profession.

The plan was presented to the House of Delegates at the Annual Meeting of the Association in Louisville on September 28, 1947. It met considerable opposition in spite of the educational campaign conducted and the ever-present threat of national socialized medicine. The service plan carried by only one vote. It was thought that this was a very unsafe margin. On the advice of that incomparable parliamentarian, J. B. Lukins, M.D., the chairman of the committee moved for a reconsideration and requested that the committee be continued and authorized to bring in another plan more acceptable to the profession.

The original plan safeguarded the physician from those above the low-income group by specifying that it became a cash indemnity for all those above the income limits set by the committee.

Cash Indemnity Proposed

The committee met and after further study decided that a cash indemnity would more likely meet with the approval and support of the profession. This plan which is now in operation was presented to the House of Delegates at the Annual Meeting in Covington, September 27, 1948. Open and covert opposition was present with a determination to kill any prepayment plan, but due to the skillful parliamentary ruling of Guy Aud, M.D., president of the Association, the opposition was nullified and the House of Delegates overwhelmingly approved the cash indemnity plan and authorized the committee to put it in operation. This the committee proceeded to do immediately but to our dismay the Attorney General ruled that we could not operate a cash indemnity plan under the Enabling Act, which specifically provided for a service plan, and that our only hope was to operate under the established law for a mutual insurance company. The mutual plan called for a deposit of \$25,000 and an enrollment of 500 members before it could be put in operation. The Council of the Kentucky Medical Association had previously loaned the committee \$15,000 and had encouraged the members in every way and on request, loaned them the additional \$10,000.

This change in plans necessitated re-writing the bylaws and Articles of Incorporation, and again soliciting the physicians who had previously signified their willingness to cooperate to

learn whether they would accept the change. Mr. Spalding Southall, director of the Kentucky Division of Insurance, and his assistants furnished invaluable services and assisted the committee in drafting the necessary documents to meet with the approval of the Attorney General.

Mr. D. Lane Tynes, executive director of the Blue Cross Community Hospital Service, Inc., who had been actively associated with the committee from its inception and to whom much credit is due—in attending every meeting and rendering services of inestimable value—promptly secured the necessary 500 members, completed all the necessary details, and we were in business. We are indeed fortunate to have him as our executive director. Under his able management and efficient organization he has brought the service to more and more citizens of Kentucky. The original committee, in the main, became the Board of Directors. Many of these physicians made considerable sacrifices in time and money, driving long distances to attend the numerous meetings during the evolution of the plan. The present directors, a number of whom were on the original committee and signed the Articles of Incorporation, have been assiduous in the discharge of their duties. They are continually exploring the field of prepayment medical care and adding increasing benefits to the policy holders, without jeopardizing the finances of the corporation. All of us realize we have but scratched the surface. We must extend the benefits and give more and more coverage. This takes time and must be on an actuarially sound basis.

In some of the original plans (California, for instance, which had the unit system) the physicians bore 50 per cent of the cost, rather than lower medical standards. Michigan had a similar experience until reorganization. There are those apostles of comprehensive coverage who shout their doctrine from the mountain tops. They want assembly-line medicine and quantity instead of quality. The American citizen is a free citizen and is peculiar in the fact that he wants to spend his own money in the

way he desires. It is purely a question of priority. He can elect to purchase prepaid medical care for approximately the price of a package of cigarettes a day but he wants to do it of his own volition and not be told that he must. We admit there are medical indigents but they are indigent in this world's goods, also in food, clothing and shelter, and their needs must be met.

In conclusion, it may not be amiss to point out that prepayment insurance is one of the most rapidly expanding programs in the United States. As of June 30, 1956, the number of persons protected against some of the costs incident to health-care for each category was as follows:

	Hos. Exp.	Surg. Exp.	In-Hospital Medical Exp.
Insurance Companies	60,500,000	58,300,000	27,000,000
Blue Cross-Blue Shield	52,570,000	37,340,000	30,000,000
Independents Plans	4,530,000	4,340,000	4,640,000
TOTAL LESS DUPLICATES	110,000,000	94,000,000	58,000,000

I would be remiss if I did not mention the devoted and efficient services of E. C. Yates, M.D., Lexington, who attended every meeting and did much pioneer work among the medical societies in his district in urging them to support a prepayment plan. His untimely death robbed the committee of one of its most valuable members. He lived sufficiently long to see the plan in successful operation, which gave him considerable personal satisfaction.

And so, ladies and gentlemen, we are justifiably proud of the growth of voluntary prepayment sickness insurance in the nation in general and in particular of its growth in Kentucky.

As of December 31, 1956, we had 168,217 members enrolled, covering 464,278 individuals. Since Kentucky Physicians Mutual, Inc., has been in operation over the past seven years it has paid \$10,726,463 on Kentucky citizens to help them defray the cost of their medical care. Furthermore, the directors are continually exploring every avenue for the expressed purpose of extending the coverage to its beneficiaries.

SUMMARY OF RECENT DEVELOPMENTS OF KENTUCKY PHYSICIANS MUTUAL, INC.*

D. LAYNE TYNES

Executive Director

The present membership of Blue Shield is 465,000 and this number is expected to pass the half-million mark by the end of this year.

During the first eight years, Blue Shield has paid the doctors 11 million dollars with 3 1/2 million of this being paid in 1956. It is estimated that the payments in 1957 will be approximately 4 1/2 million dollars.

The major problem since the beginning has been equitable adjustment of the fee schedule, and the Board of Directors has devoted many hours to this one phase of the operation alone. Many changes have been made upward, including the daily allowance of the hospital-medical rider, which was raised from \$3 per day to \$5. There have been other changes, of

**Condensed version of talk given at County Society Officers Conference at Lexington, Ky., April 4, 1957.*

course, in the surgical schedule and the anesthesia allowances.

I want to stress the fact that a great many claims are received from doctors wherein the doctor's charge is less than the scheduled allowance. In such cases, the difference, under Insurance Department regulations, has to be paid to the patient. All doctors should consult the Blue Shield fee schedule and make the charges at least the amount listed therein.

Of the 3 1/2 million dollars paid last year, \$1,700,000, nearly half, was paid for home and office surgery, medical cases in the hospital, obstetrics, anesthesia and X-ray.

The matter of extended benefits is being given serious study as the public has indicated that it wants broader coverage, and if such coverage can be offered on an actuarially sound basis, the Plan will do so.

MEDICAL CARE PROGRAM FOR MILITARY DEPENDENTS*

DON GIFFEN

Assistant Director

Initial consideration for a program of civilian medical and hospital care for the dependents of uniformed services dates back several years. The objective of the government was to improve career incentives by providing more medical care to dependents. The Dependents Medical Care Act was enacted by the 84th Congress and became effective December 7, 1956.

The A.M.A., representatives of State medical societies and other interested groups met frequently with the Department of Defense over a period of several months to develop methods to implement the law. Throughout these discussions, as well as at the Congressional hearings, Blue Shield nationally took the position that the obligation of the government under the law could be discharged fully only by arrangements with the purveyors of the services; that because of its organization and relation to the medical profession, Blue Shield was in a position *only* to offer its services as fiscal agent to its sponsoring medical societies. The Kentucky State Medical Association negotiated a schedule of allowances directly with the Department of Defense. The Association designated the Kentucky Physicians Mutual to act as its fiscal agent.

It should be pointed out that a physician shall have the right to decline to participate under the program or to refuse any individual case without stating a reason therefor, and dependents shall have the privilege of choosing any physician who agrees to provide medical services in accordance with the schedule of allowances

**Condensed version of talk given at County Society Officers Conference at Lexington, Ky., April 4, 1957.*

or the review procedures. The State Medical Association has appointed a "Review Committee" to determine, with government approval, allowances for services not adequately covered by the schedule or for services of unusual degree above that intended by the schedule.

Briefly, the law provides for hospital and professional care in civilian hospitals and by civilian physicians. Care is limited to the spouse of the serviceman on active duty and children 21 years of age and under. Services authorized are:

1. Hospitalization in semi-private accommodations up to 365 days for each admission. The patient shall pay the first \$25 or \$1.75 per day, whichever is greater.
2. In-hospital professional services for physicians and surgeons fees according to the schedule of allowances.
3. Complete obstetrical and maternity service including prenatal care, postnatal care and infant care.
4. Out-patient professional care for treatment of bodily injuries. Patient shall pay first \$15.
5. Diagnostic tests and procedures incident to hospitalization for surgery or bodily injury.

Care is not authorized under the program for treatment of chronic diseases or nervous and mental disorders except for acute conditions of these diseases; for services not related to in-patient care (except bodily injury); elective medical and surgical care not medically indicated, dental care (except as necessary adjunct to medical or surgical care), ambulance and prosthetic devices.

(Continued on Page 556)



EDITORIALS



"THE GIRL OUT FRONT"

ANY GIRL who could answer the telephone, record the daily charges, act as chaperone and make out the bills at the month's end was considered in the past to be adequate office help by the majority of physicians. Our way of living has changed a great deal in the past two decades and the practice and business of medicine has changed with it. The people have become health conscious and the work load of specialist and general practitioner is greater than it has ever been; health and hospital insurance and multiplying tax forms have made it mandatory to prepare and file detailed notes on each patient and to keep accurate business records; and new diagnostic and therapeutic aids have increased the effectiveness and complexity of office procedures. The physician, who is to practice successfully, must delegate most of his business affairs and many of the semi-technical procedures to his office assistant. To perform all of these duties well is the work of the trained "medical secretary."

The American Medical Association is interested in the problem of obtaining adequate facilities to train this type of personnel. They have recently published a research study by Harold Mickelson, Northeast Missouri State Teachers College, on "The Medical Secretary; Her Duties, Training, and Role on Medical Team." This summarizes the answers to mail questionnaires sent to approximately 500 top-notch medical secretaries and of personal interviews with physicians and business educators. The purpose of the study is "to determine the ideal knowledges, skills and personal qualities of medical secretaries." It is hoped that from information secured in this study planning may be done to secure an adequate supply of well trained medical secretaries and assistants in the future.

Mickelson found that most of the physicians interviewed placed personality as the most important quality in a good secretary. No amount

of technical skill can substitute for its absence. The qualities needed include: pleasantness, neatness, ability to get along with people, ability to use the telephone effectively, intelligence, politeness, ability to keep secrets, interest in and feeling for people, initiative, honesty, enthusiasm, interest in medical work, loyalty, cooperation, conservatism, pleasant voice, self-confidence, ability to make decisions, ability to instill confidence, willingness to continue to learn on the job, dependability, patience, aggressiveness (must not be shy), accuracy, memory, maturity, and a sense of humor.

The type of business training should be a general secretarial course with certain additions that are not usually given in such courses comprising accounting systems especially suitable for physicians offices, use of medical terms, completion of insurance forms and hospital reports, medical secretarial ethics, how to get along with sick people, and on-the-job training in the physician's office—a kind of internship.

The training in semi-technical activities should embrace those procedures related to the examination and treatment of patients, taking temperatures and blood pressures, assisting with minor office surgery, giving certain types of injections, sterilizing instruments, and performing certain laboratory tests, as urine analyses and simple blood tests.

The requirements of personality and education given above may appear to limit the number of students entering the field to a small number, but it must be remembered that these are standards for the training of competent and fully qualified medical secretaries who are entering the profession as a life career and not simply as another job in a succession of jobs. Any girl so qualified can look forward to a career which is interesting and rewarding in service to the ill.

Physicians must realize that an incompetent secretary can be a detriment to their practice in patients, time, and money lost while a well

trained medical secretary will earn her salary many times over. They must create a demand for these trained individuals and must increase the salaries which they pay for office assistance commensurate with the skill and training of such a secretary.

Individual doctors, county and state medical societies can help provide this trained aid by urging colleges and business schools which can provide this type of training to start such courses, by recruiting qualified high school graduates for high-quality medical secretarial training, by organizing refresher courses in

medical office administration for employed medical secretaries and assistants (as has been done by the K.S.M.A.), and by persuading those now working to increase their effectiveness through additional training in school or on the job. The general introduction of such training will give many girls an opportunity for fruitful careers and will free many physicians from the drudgery of office details, giving them more time for their primary mission of patient care.

Richard G. Elliott—M.D.
Lexington

THE CURE IN SURGERY

The term, cure, is widely used in medicine. It is by the physician in talking to his patients and in his scientific articles.

A dictionary may define cure variously, as the successful treatment of disease, or a restoration of health. The physician understands that it is a relative term. A cure to him may mean to halt the progress of a disease for a limited number of years or to relieve a condition which threatens the patient's life. This cure may leave in its place other sequellae. To the laymen, cure means to return to a state of health, unimpaired by defect.

Surgery is a dramatic means of effecting a cure. It is never attempted unless the surgeon feels that he can help his patient. To help or improve is not the layman's conception of cure in its broad sense.

It is reported that good results are obtained in 85% of patients having surgery for chronic duodenal ulcer. These good result cases are relieved of pain, obstructive symptoms, episodes of hemorrhage and threat of perforation. These good results may have inability to gain weight if subtotal gastrectomy has been done. They may have an atonic stomach with dyspepsia or intermittent episodes of diarrhea if a vagotomy and gastroenterocolostomy has been done.

Again, the patient with chronic cholecystitis and cholelithiasis is a proper candidate for cholecystectomy. The removal of the gall bladder ends the attacks of cholecystitis, the threat of passage of the stone into the common duct, and the biliary passage from repeated infection. After the gall bladder has been removed, the patient is still unable to store bile. An excess

of fat in the diet will produce flatulence, nausea and constipation.

These things are well known to all of us in the medical profession but not to our patients in the laity. The purpose of therapy and results, good and bad must be carefully explained to them for proper understanding. Not because it is a poor term, but because it is a poorly understood term, the word cure should be used with great caution, if used at all. It is far better to converse with the patient in the more conservative terms of improvement. It is wise to acquaint the patient with the sequellae and the dysfunctions which will not be improved by surgery *before* it is performed.

Understanding of our goals by the laity is a service to the entire medical profession. It is easier to prepare a patient to accept a cholecystectomy if her sister knew what to expect from a similar operation than if she is permanently dissatisfied by intermittent flatulence. To gain a desirable objective it is often necessary to accept an undesirable feature.

If we can rid the patient of his carcinoma of the rectum, we feel that the colostomy is small enough price to pay. If we can remove the advanced ulcerated carcinoma of the breast and give relief, we feel that treatment has been worth while even though the relief is only a few months and the patient lives no longer than if untreated. When our therapeutic goal is less than a complete cure it should be accepted for its benefits with complete understanding by physician and patient.

Robert C. Tate, M.D.



ORGANIZATION SECTION



KSMA HEADQUARTERS OFFICE SCHEDULES MOVE TO NEW MEDICAL ARTS BUILDING ABOUT AUG. 1

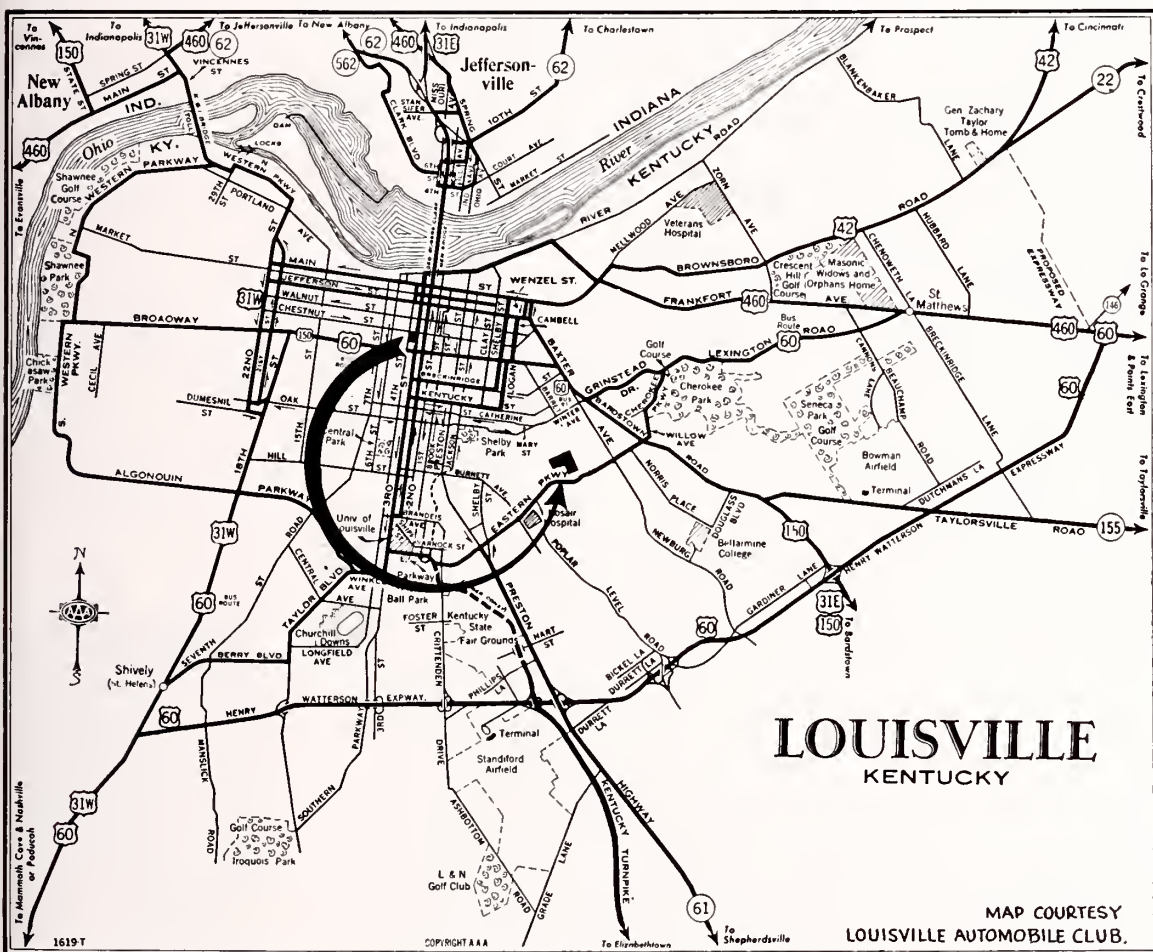
**Location at 1169 Eastern Parkway
Accessible to Expressway,
Will Have Free Parking**

The KSMA Headquarters Office is scheduled to move to the new Medical Arts Building, 1169 Eastern Parkway in Louisville, about August 1, Richard R. Slucher, M.D., Buechel, president, said following the signing of the lease.

The move was authorized by the Council of the Association at its April 4 meeting in Lexington, when

it accepted the report of the Headquarters Office Relocation Committee, headed by Carlisle Morse, M.D., Louisville. The new building is located on an eight-acre plot and will have free parking for more than 400 automobiles.

Russell E. Teague, M.D., Louisville, State Health Commissioner, told the Council before the vote was taken that in all probability the State Department of Health would move to new and more adequate quarters in the not-too-distant future. Doctor Teague said he felt this was an excellent opportunity for the Association to secure sufficient office space at such



Arrow on above map points from present location of the KSMA Headquarters Office, 620 South Third Street, to the new location, 1169 Eastern Parkway. Map also shows easy accessibility to new Headquarters Office from all highways leading into Louisville.

a good location, and was very sorry he could not offer more space at the present location.

In a joint statement, Doctor Slucher and Doctor Teague emphasized that the move would in no way disturb the present excellent working relationship that exists between the Medical Association and Department of Health. Both felt that cooperation between the two groups was at an all-time high, and that each organization would be able to render a better service to the public as a result.

The Headquarters Office of the Association has been housed in the State Department of Health Building since 1907. At that time, the State Department of Health was located in Bowling Green. When the Department moved to Louisville, the KSMA office was moved also. It was during the 1937 flood that all the old records of KSMA, along with many of those of the Department, were destroyed, when the Department was at the 6th and Main Street location.

The KSMA lease calls for 1,000 square feet on the first floor with 275 feet on the subfloor which will be used for storage and work space in the new Medical Arts Building. The building is air-conditioned throughout and, in addition to housing the KSMA Headquarters Office, some 90 physicians' offices, the Jefferson County Medical Society and the Kentucky Cancer Society, it will have a pharmacy, banking facility, restaurant, etc.

The new building is located on the north side of Eastern Parkway between Beargrass Creek and Dahlia Avenue, and is easily reached from the Watterson Expressway. Built at a cost of \$1,200,000, the structure will have a meeting room that will seat more than 150, a glassed-in "roof garden" and open-air lounging space adjacent to it. Partitions in the offices will be of walnut and birchwood.

Tuition Is Raised at U of L

A tuition raise instituted in all schools of the University of Louisville, beginning with the 1957 summer term, will increase the present \$800 fee for Kentucky students in the School of Medicine to \$900 and up the \$1,200 to out-of-state students to \$1,300, according to published reports.

The increase is expected to raise the university's income more than \$300,000 a year, U. of L. President Dr. Philip Davidson stated. Part of this will go into salary increases, averaging about 5 per cent, he said. Plans include the addition of faculty members to the various school staffs.

Guest Speakers for Annual Session Sept. 17-19 Announced

Plans for an unusually strong scientific program for the 1957 Annual Meeting have been completed, according to KSMA President Richard R. Slucher, M.D., Buechel, who serves as chairman of the Committee on Scientific Assembly.

There will be 12 nationally-known guest speakers who will discuss papers during the 1957 session,

which will be held September 17, 18 and 19 at the Columbia Auditorium in Louisville. These speakers will also be the guests of their respective specialty groups and will have a part in the program during the special Wednesday afternoon sessions.

Among the essayists is John M. Rumball, M.D., chief of medical service, Veterans Administration Hospital, Coral Gables, Fla. Doctor Rumball, who is the guest of the Kentucky Chapter of the American College of Physicians, will discuss "Modern Concepts In the Management of Hepatic Failure." The presentation will take place Thursday morning, September 19.

"The Behavior of Serum Iron In Hepatitis" will be the subject of Doctor Rumball's talk before the specialty group Wednesday afternoon, the 18th. The author of many publications and medical magazines of national circulation, Doctor Rumball is also active in the American Gastroenterological Association and the American Gastroscopic Society.

Gardner Middlebrook, M.D., Denver, Col., will discuss "Tuberculosis In Childbirth: Some Aspects of

Prevention, Diagnosis and Treatment" at the general session Tuesday morning, September 17. Doctor Middlebrook is the winner of the Pasteur Medal, Institut Pasteur, Paris, 1954.

As a guest speaker of the Kentucky Chapter of the American Academy of Pediatrics at the specialty group session Wednesday afternoon, he will talk on "Pathogenesis and

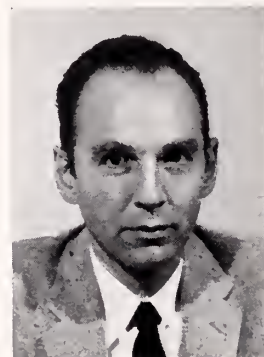
Treatment of Mucoviscidosis and the Accompanying Increase In Susceptibility to Pulmonary Infections.

Donald M. Shafer, M.D., New York, is the guest of the Kentucky Eye, Ear, Nose and Throat Society. He is surgical director of the Manhattan Eye, Ear, Nose and Throat Hospital and director of the Eye Bank for Sight Restoration.

Dr. Shafer's title in the presentation before the general session Tuesday afternoon, September 17, will be "The Role and Function of the National Eye Bank." The next afternoon, at the specialty group meeting, he will discuss "Vitreous Implant for Retinal Detachment."



Dr. Rumball



Dr. Middlebrook



Dr. Shafer

12th, 15th Dists. Meet June 27 at Cumberland Falls

A strong scientific program has been planned for the joint afternoon-and-dinner meeting of the Twelfth and Fifteenth Councilor Districts at Cumberland Falls on June 27, according to an announcement from Garnett J. Sweeney, M.D., Liberty, and Charles B. Stacy, M.D., Pineville, councilors for the respective districts.

The scientific program, which will begin at 4:00 p.m. EST at Dupont Lodge, has been approved for three hours of Category I credit by the American Academy of General Practice, states Frank L. Duncan, M.D., Monticello, chairman of the KAGP Education Committee.

Following the dinner hour, attending physicians from the 18-country area will hear KSMA president Richard R. Slucher, M.D., set forth current associational benefits under the subject, "A Privilege." William R. Willard, M.D., dean of the University of Kentucky Medical School, will cite the progress being made on the UK Medical Center.

Essayists at the scientific session include three faculty members of the University of Louisville School of Medicine: W. M. Christophersen, M.D., professor and chairman, department of pathology, who will lead off with "The Value of Cytology in Cancer Detection"; Walter S. Coe, M.D., associate professor of medicine, on "The Family Physician and the Electrocardiogram"; and Douglas M. Haynes, M.D., associate professor of obstetrics and gynecology, on "Obstetric Hemorrhage."

Doctor Sweeney will preside at the afternoon session and Doctor Stacy will have charge of the evening program.

Kentucky Surgical Society Elects R. W. Robertson, M.D.

Robert W. Robertson, M.D., Paducah, was elected president of the Kentucky Surgical Society, succeeding Francis M. Massie, M.D., Lexington, at the group's eighth annual meeting at the Campbell House, Lexington, May 17 and 18.

George H. Rodman, M.D., Greenville, was named vice-president. C. Melvin Bernhard, M.D., Louisville, is secretary-treasurer and has two years of a three-year term to serve.

It was announced that next year's meeting will be held jointly with the Virginia Surgical Society at the Greenbrier Hotel, White Sulphur, W. Va., April 10-12.

Scientific guest speaker was Frederick A. Collier, M.D., chairman of the Department of Surgery, University of Michigan. The subject of his presentation was "The Spleen—Some of Its Diseases That May Be Treated by Surgery."

There were two scientific sessions. Members who presented papers at the Friday session were Hubert C. Jones, Berea; William H. Hagan, Louisville; Edward B. Mersch, Covington; Howard E. Dorton, Lexington, and Lytle Atherton, Louisville. Saturday's speakers were Thomas J. Giannini, Louisville; Branham B. Baughman, Frankfort; James G. Holloway, Lexington, and William K. Massie, Lexington.

A total of 78 members and 21 guests attended the sessions. The annual dinner was held at Keeneland.

Ten surgeons were voted membership in the Society. They are: McHenry S. Brewer, Louisville; John Dickinson, Glasgow; William H. Hyden, Lexington; Hugh B. Lynn, Louisville; John Herman Mahaffey, Louisville; George McClure, Danville; Andrew M. Moore, Lexington; Marc J. Reardon, Covington; Harold Redd, Lexington, and Merrill W. Schell, Owensboro.

Dr. Johnson Resigns From Staff Of U. L. Medical School

W. O. Johnson, M.D., Louisville, has resigned as professor and chairman of the Department of Obstetrics and Gynecology at the University of Louisville, School of Medicine. Doctor Johnson has held this position for the past 11 years and has been a member of the department's staff for the past 30 years.

Douglas M. Haynes, M.D., Louisville, who has been associated with the department as associate professor and department executive, will succeed Doctor Johnson. Doctor Haynes, who graduated from Southwestern Medical College, Dallas, in 1946, received his specialty training at Parkland Hospital in Dallas and served two years in the Armed Forces.

Doctor Johnson will continue as a professor in the department following the change which is effective July 1. A native of Winchester, Ky., Doctor Johnson graduated from Kentucky Wesleyan in 1915 and Johns Hopkins Medical School in 1920. For the next seven years Doctor Johnson received his surgery training at the Cleveland Clinic before coming to Louisville.

The year Doctor Johnson came to Louisville he became a fellow in the American College of Surgery. He has served as president of the Kentucky Obstetrical and Gynecological Society and president of the Southern Gynecological and Obstetrical Society and is a member of many other groups in this field.

Educator to Speak Sept. 18 At President's Luncheon

Dr. Kenneth McFarland, Topeka, Kan., nationally-known educator and lecturer, will be the guest speaker at the President's Luncheon of the KSMA Annual Meeting in the Brown Hotel Roof Garden September 18, according to announcement by KSMA President Richard R. Slucher, M.D., Buechel. The luncheon is scheduled for 12 noon Daylight Savings Time.

Although best known for his work as a school administrator, Doctor McFarland through the years has become increasingly identified with business, industry, agriculture and civic organizations throughout the country. He will appear in Louisville through the courtesy of General Motors Corporation which he serves as educational consultant and lecturer.

One of Doctor McFarland's interests has caused his friends to refer to him as "A PHD with horse sense." On his 140-acre farm adjoining Topeka he raises polled Hereford cattle and prize-winning Tennessee Walking horses.

ACP 38th Session in Boston Draws 41 Kentuckians

Forty-one KSMA members of the Kentucky Chapter of the American College of Physicians attended the 38th annual session of the College in Boston, April 8-12. Sam A. Overstreet, M.D., Louisville, Governor for Kentucky, headed the Kentucky delegation.

According to J. Murray Kinsman, M.D., Louisville, a member of the Board of Regents, the following Kentuckians were admitted to membership as of April 6: Matthew Cotton Darnell, M.D., Lexington; Robert Lowrey McClendon, M.D., and Beverly Todd Towery, M.D., both of Louisville.

Other KSMA members attending, as listed by the College's daily bulletins provided *The Journal* by A. Clayton McCarty, M.D., Louisville, were:

Tuesday

James T. Gilbert, Jr., and Harold Keen, Bowling Green; Willard Litzenger, Elizabethtown; Lewis Dickinson, Glasgow; Robert A. Bearor, Hazard; Rankin C. Blount, Irving F. Kanner, Lloyd D. Mayer and Frank B. Moosnick, Lexington.

John R. Gott, James E. Bryan, Harold C. Morris, William P. Peak, Grover B. Sanders and Robert S. Tillett, Louisville; Harold J. Schupbach and Frank L. Yarbrough, Owensboro.

Wednesday

Murray L. Rich, Covington; Capt. Cornelius J. Hayes, Lt. Col. Jules J. McNerney and Capt. Samuel W. Stein, Fort Knox; John H. Willard, Harlan; Allen L. Cornish, Karl C. Kelty and Lt. Cmdr. Richard H. Thurm, Lexington.

Marion F. Beard, Zollman Kommor, Solomon J. Rosenberg and Benjamin M. Stout, Louisville; Charles P. Orr, Paducah.

Thursday

William H. Anderson, Harlan; Irving F. Kanner and Albert S. Warren, Lexington; Ralph M. Denham, David H. Neustadt and Samuel M. Smith, Jr., Louisville.

Friday

Russell S. Boles, Louisville.

230 Attend May 14 Annual Meet Of Fayette County Society

Approximately 230 physicians attended the annual dinner meeting of the Fayette County Medical Society Tuesday, May 14, at the Lexington Country Club. Physicians from surrounding localities were guests of the Fayette County group.

Speaker for the special occasion was James Eckenhoff, M.D., professor of anesthesiology at the University of Pennsylvania School of Medicine, Philadelphia. Doctor Eckenhoff lectured on the general subject of anaesthesia in cardiac diseases. The talk was illustrated.

John Scott, M.D., veteran Fayette County member, introduced Doctor Eckenhoff and described experiences that related to Doctor Eckenhoff's residency in Lexington. Fayette County President A. B. Barrett, M.D., presided, and Secretary T. R. Bryant, M.D., handled the arrangements.



The above picture taken at the 9th District meeting shows John B. Floyd, Sr., M.D., Richmond, former TB Commission chairman; Mitchell Denham, M.D., Maysville, present member; James M. Stevenson, M.D., Brooksville, Councilor for the 9th District, and Isadore Zapolsky, M.D., superintendent of District 3 TB Hospital, Paris.

KSMA Dist. 9, TB Dist. 3 Met at Paris May 9

Chest disease presentations shared program honors with vital administrative matters in Kentucky medicine to claim the attention of sixty physicians at a joint meeting of the KSMA Ninth Councilor District and Kentucky TB District 3, at the State TB Hospital at Paris on May 9, according to J. M. Stevenson, M.D., Brooksville, Ninth District councilor.

Afternoon scientific discussions on lung tumors and fungus diseases of the chest were presented by Donald B. Effler, M.D., of Cleveland's famed Crile Clinic, and D. N. Pickar, M.D., of the V. A. Hospital, Louisville. After-dinner topics concerned associational matters as outlined by KSMA President Richard R. Slucher, M.D., and progress being made at the University of Kentucky Medical Center by UK's Dean William R. Willard, M.D. Phases of pulmonary diseases were discussed by George W. Pedigo, M.D., of the University of Louisville.

Marvin B. Dillon, M.D., president, Bourbon County Medical Society, Gault Robertson, D.D., member, District 3 Advisory Committee and Dr. Stevenson also appeared on the program. Coincident with the meeting, the wives of the attending physicians met at nearby Stoner Creek Country Club.

Dr. Pace of Paducah Heads ACS State Chapter

J. Vernon Pace, M.D., Paducah physician and surgeon, was elected president of the Kentucky Chapter of the American College of Surgeons at the chapter's meeting at French Lick, Ind., on April 28.

Sam Flowers, M.D., Middlesboro, was elected vice president and Ernest C. Strode, M.D., Lexington, secretary-treasurer. Charles Woods, M.D., Louisville, was named councilor.

Immediate past chairman of the KSMA Council on which he has served as a member for a number of years, Doctor Pace has been active in KSMA programs. He received his medical training at Vanderbilt University and at the University of Pennsylvania.

FOR POSITIVE DIURESIS

ROLICTON[®]

Brand of Amisometradine

- oral b.i.d. dosage
- continuous control of edema

The new, highly effective oral diuretic, Rolicton, greatly simplifies the task of maintaining an edema-free state in the patient with congestive heart failure. Rolicton meets the criteria for a dependable diuretic: continuous effectiveness, oral administration and clinical safety.

In extensive clinical studies the diuretic response clearly indicates that a majority of patients can be kept edema-free with Rolicton. In these investigations it was noted that side reactions were uncommon. When they did occur they were usually mild.

In most edematous patients Rolicton may be employed as the sole diuretic agent. When used adjunctively in severe cases, Rolicton is also valuable in eliminating the "peaks and valleys" associated with the parenteral administration of mercurial diuretics.

One tablet of Rolicton b.i.d., after meals, is usually adequate for maintenance therapy after the first day's dosage of four tablets. Some patients respond well to one tablet daily. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.



SEARLE

HIGHLIGHTS OF THE APRIL 4 MEETING OF THE KSMA COUNCIL*

The Council of the Kentucky State Medical Association met April 4 in the Phoenix Hotel in Lexington following the County Society Officers Conference. The proposed budget for the 1957-58 fiscal year was presented by Budget Chairman L. O. Toomey, M.D., Bowling Green, and was approved. A condensed statement of the budget follows:

ESTIMATED ASSETS AS OF JULY 1, 1957	
GENERAL OPERATING AND	
JOURNAL ACCOUNTS	
Current Assets	\$ 43,300.00
Fixed Assets	<u>5,000.00</u>
TOTAL ESTIMATED	
ASSETS, GENERAL	
OPERATING AND	
JOURNAL ACCOUNTS	
	\$ 48,300.00
RESERVE FUND ACCOUNT	
Investments	53,728.40
McDOWELL FUND ACCOUNT	
Fixed Assets	<u>48,250.00</u>
GRAND TOTAL OF ALL	
ESTIMATED ASSETS	\$150,278.40

ESTIMATED INCOME AND EXPENSES, JULY 1, 1957—JUNE 30, 1958		
GENERAL OPERATING ACCOUNT		
	<i>Estimated</i>	<i>Estimated</i>
	<i>Income</i>	<i>Expense</i>
Income	\$ 71,425.00	
Expense:		
Current Fund Account	\$ 58,625.00	
Officers, Councilors and miscellaneous committees expense account..	1,200.00	
Medico-Legal Committee Account...	350.00	
Promotional Expense Account	3,500.00	
Diabetic Detection Program Account	200.00	
Postgraduate Medical Education		
Program Account	1,000.00	
Annual County Society Officers		
Conference Account	600.00	
Rural Health Committee Account...	300.00	
Woman's Auxiliary Account	500.00	
Physicians Placement Committee		
Expense Account	<u>200.00</u>	
TOTAL ESTIMATED IN-		
COME AND EXPENSE,		
GENERAL OPERAT-		
ING ACCOUNT		
	\$ 71,425.00	\$ 66,475.00
JOURNAL ACCOUNT	\$ 28,000.00	28,475.00
ANNUAL MEETING		
ACCOUNT	10,990.00	10,990.00
McDOWELL FUND		
ACCOUNT	<u>3,000.00</u>	<u>2,975.00</u>
TOTALLED BUDGETED		
INCOME—		
ALL ACCOUNTS	\$113,415.00	
TOTALLED BUDGETED		
EXPENSE—		
ALL ACCOUNTS	<u>108,915.00</u>	\$108,915.00
GAIN	\$ 4,500.00	

Carlisle Morse, M.D., Louisville, chairman of the Headquarters Office Relocation Committee, explained that his group had considered a number of locations following its activation at the December 16 meeting of the Council. After careful investigation it had recommended to the Executive Committee that space be secured in the new Medical Arts Building at 1169 Eastern Parkway, Louisville. It was explained that there would be a total of 1275 square feet, some 315 more than the headquarters office now had, and that there would be parking space for up to 400 automobiles. He explained that his committee was recommending that the Association accept a ten-year lease at \$4000.08 a year.

In a motion that was unanimously passed, it was stated that the KSMA attorney should carefully scrutinize the lease before it was signed. It was stated that the new building would probably be ready for occupancy around August 1, and that the Association would, no doubt, move its office at that time.

Nominees Accepted

Under Kentucky law the Association is obligated to recommend three men for each vacancy filled by physicians on the Hospital Licensure Council. The KSMA Council was told there would be two expirations on June 30, 1957, as the terms of C. C. Howard, M.D., Glasgow, and Hershell B. Murray, M.D., Liberty, expire. The Council accepted the recommendation of the Executive Committee that the three nominees for the expiring term of Doctor Howard be: C. C. Howard, Glasgow; Jesse T. Funk, M.D., Bowling Green; William H. Barnard, M.D., Elizabethtown. For Doctor Murray's position the three men nominated were: Hershell B. Murray, M.D., West Liberty; Joseph M. Bush, M.D., Mt. Sterling; Frank Duncan, M.D., Monticello. This recommendation was accepted.

Following discussion, the Council authorized the Chairman to appoint a committee to consider changing the Annual Meeting date from the fall season of the year to the spring and report back to the Council.

Attorney Fees Authorized

The Council authorized the payment of attorney fees in a mal-practice action, as recommended by the Medico-Legal administrator and provided for under the KSMA bylaws.

Considerable time was spent by the Council in the discussion of legislation which the Association might wish to consider supporting at the 1958 session of the Legislature. Action on these matters was deferred until more information could be obtained.

The Council accepted a recommendation from the Committee on Medical Education and Economics, which was presented by a member of that committee, A. B. Barrett, M.D., Lexington. The recommendation,

**(As authorized by the 1956 session of the House of Delegates, The Journal of the KSMA is presenting a digest of minutes of the April 4 meeting of the Council of the KSMA.)*

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT

1957 Annual Meeting

Kentucky State Medical Association

Columbia Auditorium

Louisville, Kentucky

September 17, 18, 19

Fill Out and Mail to:

EVERETT L. PIRKEY, M.D., Chairman

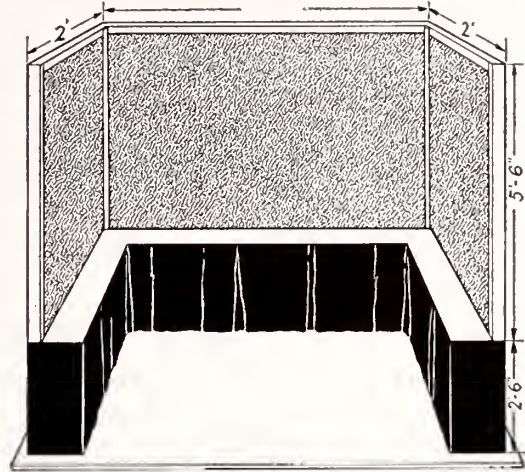
Committee on Scientific Exhibits

Louisville General Hospital,

Louisville 2, Kentucky

(Applications for space should be received
before July 1, 1957)

Dimensions and structure of K.S.M.A. Scientific
booth are shown in accompanying illustration



1. Title of Exhibit:
2. Description or nature of exhibit: (Attach brief description to this blank).
3. Will you require shelf space?
4. Give approximate amount of wall space needed. (Included in total space is two side walls of
two feet in length)
5. Name of institution co-operating in the exhibit (if desired)
6. Name of exhibitor:
..... (Street & No.) (City)

The Kentucky State Medical Association will provide without cost to the exhibitor the following: Exhibit space, shelves, sign for booth, current, bracket lights, provided all items are approved in advance by the committee.

Cost of transporting exhibits to the meeting must be borne by the individual exhibitor as well as costs of cards, signs, etc., which are a part of the exhibit.

View boxes, furniture, decorations, etc., may be rented, if desired, by applying directly to Jos. T. Griffin Company, 704 West Main Street, Louisville 2, who supply equipment for the annual K.S.M.A. meeting.

which was referred to the KSMA Committee on Hospitals for implementation, called for a study of methods of accreditation by the Joint Commission for the Accreditation of Hospitals, with the suggestion that such revisions and improvements as felt indicated, be made. The recommendation was accepted.

Following the mandate of the House of Delegates at the 1956 Annual Meeting, the Council accepted the report of the Nominating Committee, headed by Carlisle Morse, M.D., to name a Council-appointed Committee on Voluntary Health Associations. The following Louisville physicians were elected to serve: Armand K. Fischer, chairman, Marion F. Beard, C. Melvin Bernhard, W. McDaniel Ewing, Louis M. Foltz, John S. Llewellyn, Thomas M. Marshall, Ludwig H. Segerburg, Lawrence A. Taugher.

The Council then studied a recommendation brought by the chairman of the KSMA Committee on Postgraduate Medical Education, Garnett Sweeney, M.D., Liberty. This recommendation had to do with the possibility of his committee working with the telephone company and possibly certain drug firms in setting up closed-circuit postgraduate television seminars for local county medical societies. The Council accepted the recommendation and authorized his committee to continue to study the matter.

Other guests of the Council at this meeting, in addition to Doctor Barrett, were Russell E. Teague, M.D., Louisville, State Commissioner of Health; John G. Archer, M.D., Prestonsburg; David M. Cox, M.D., Louisville; T. G. Forsee, M.D., Bardstown; E. Gaines Davis, Frankfort, attorney for the Association.

Sixth District Meeting Held April 23 in Franklin

The quarterly dinner meeting of the Sixth Council District was held at Franklin Tuesday, April 23, with a total of 38 physicians present, L. O. Toomey, M.D., Bowling Green, councilor for the district, stated.

KSMA President Richard R. Slucher, M.D., Buechel, and Samuel E. Paris, M.D., Bowling Green, shared the spotlight on the program.

Following the program, a brief business session was held. Arcy O. Miller, M.D., Scottsville, president of the district, presided. Arrangements were made by Harold Keen, M.D., Bowling Green, secretary.

"Mr. Recreation" Is Mayfield M.D.

James T. Fuller, M.D., Mayfield physician and surgeon, has been named "Mr. Recreation for 1957" by the Jefferson County Youth Association. An avid sportsman, Doctor Fuller was honored by the Youth Association for his work in organizing the Mayfield-Graves County Recreation Association.

Doctor Fuller was a Rear Admiral in the Navy during World War II. While in service he received national recognition for his medical attention to Capt. Eddie Rickenbacker after he rescued the famed flier from the Pacific Ocean. Doctor Fuller played pro football with the Cincinnati Reds back in 1920-22.

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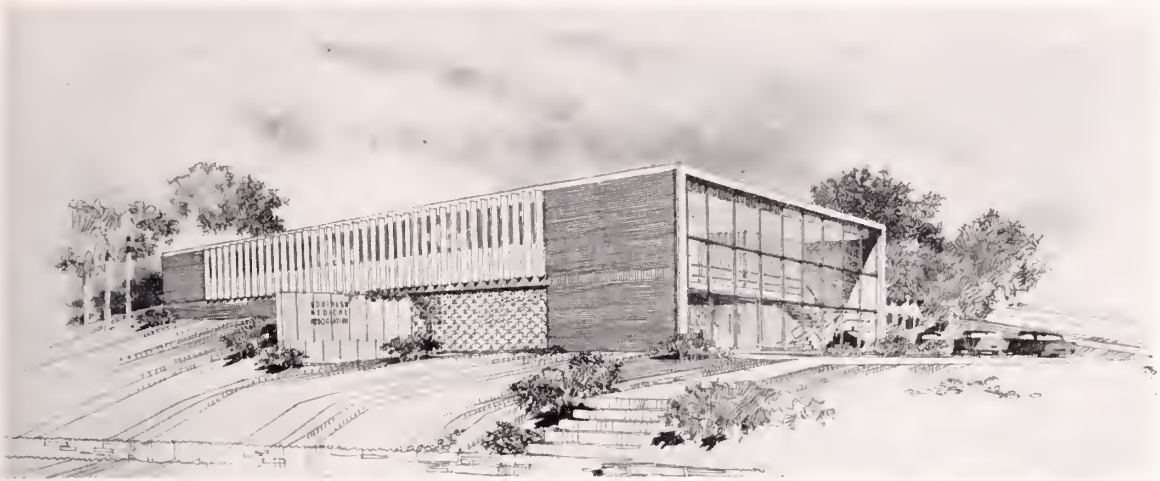
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Here is artist's conception of how the proposed new SMA building to be constructed in Birmingham will look.

SMA Plans to Build New Hdq. in Birmingham

Plans have been announced by the Southern Medical Association for the erection of a modern headquarters office building in Birmingham, according to A. Clayton McCarty, M.D., Louisville, chairman of the SMA Council and member of the Home Building Finance Committee.

The cost of the building is estimated at \$125,000.

The land cost is \$50,000. Brochures describing the proposed split-level structure have been mailed to the SMA's 10,000 members, and have resulted in the contribution of several thousand dollars toward the project, states J. P. Culpepper, Jr., M.D., Hattiesburg, Miss., Building Committee chairman. Final fund needs will be secured through a conventional mortgage loan.

The new headquarters will house executive and business offices; a conference-library room, editorial department of the Southern Medical Journal, and rooms for the Woman's Auxiliary.

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AHA is Accepting Applications For Research Fellowships

Applications by research investigators for the support of projects to be developed during the fiscal year beginning July 1, 1958 are now being accepted by the American Heart Association.

The deadline for applications for research fellowships is September 15, 1957 and for grants-in-aid, November 1, 1957. The applications may be made for: Established Investigatorships, Research Fellowships, Advanced Research Fellowships, and Grants-in-Aid.

One-half of all funds received by the American Heart Association is allocated to research, with approximately \$20 million given to this field in the last nine years.

Mrs. Dugan Given Wiley Award

Mrs. Sarah Vance Dugan, director of the State Health Department's Division of Foods and Drugs and former head of the U.S. Association of Food and Drug Officials, has been named recipient of the Association's top annual honor—the Harvey W. Wiley Award.

A director of the Kentucky food-and-drug division for 36 years, Mrs. Dugan is the second to receive this honor. She guided food quarantine and refugee-center inspection during the 1937 flood and formerly directed a chemical laboratory in the Panama Canal Zone. She holds an M.S. degree from the U of L and has taught chemistry at the medical school.

Nationwide Health Survey Launched by USPHS

A National Health Survey, in the nature of household interviews to be conducted in 330 sampling areas, was launched last month by the U.S. Public Health Service, according to the AMA's Council on Medical Service.

Congress enacted legislation during the last session to provide for such surveys and special studies, which would determine the extent of illness and disability and related information. Statistical information will include personal data and length of time sufferers of diseases, injuries, or handicapping conditions have been unable to carry on their usual activities, and whether they have had medical attention.

At least one sampling unit is located in every state, the Council reports. Field work on this project will be handled by the Bureau of the Census for the USPHS.

Dr. Howard is Best Boss

C. C. Howard, M.D., Glasgow, was selected as the "boss of the year," at the Glasgow Business Woman's Club Bosses night banquet held recently.

More than 150 "bosses" of the local community were present to see Dr. Howard receive his award and to hear the tribute paid for his work with the TB Hospital, the medical student loan fund, the Glasgow School for Practical Nurses, and for his service in his own clinic and hospital.

KSMA Head, UT Professor Address First District

More than 50 physicians attended the annual spring dinner meeting of the First Councilor District at Paducah April 24, according to J. Vernon Pace, M.D., Paducah, councilor.

The Association's president, Richard R. Slucher, M.D., Buechel, spoke following the dinner and described many of the Association's services and discussed some of the problems medicine is facing.

Thomas N. Stern, M.D., associate professor of medicine from the University of Tennessee, presented an illustrated lecture. Doctor Pace expressed himself as being well pleased with the attendance and program.

Case Discussions

(Continued from Page 536)

a history of conversion of a negative tuberculin skin test to a positive tuberculin skin test within the previous six months. Also treatment is recommended in children ten to sixteen years of age with a history of conversion within one year, particularly in females within six months of the menarche. All children with clinical or radiological evidence of primary tuberculosis should be treated.

Daily therapy with the antimicrobial agents is continued without interruption for a minimum of one year, as the worst complications occur during this period. The generally recommended dosages of these drugs are:

Isoniazid 12-15 mg/kg/day

Para-aminosalicylic acid 300 mg/kg/-day, with a maximum dose of 12/grams/-day.

The primary interest of physicians is the prevention and treatment of disease. The diagnosis and treatment of primary tuberculosis represents a large field of previously untreated disease. It is only through our understanding of the clinical course of primary tuberculosis and judicious treatment of this disease that the crippling and fatal complications can be prevented. Untreated individuals with primary tuberculosis are carrying a focus of infection which may erupt. This concept of treating primary tuberculosis is relatively new, and the tools for doing so are frequently changing. It is imperative that the physician keep abreast of the advancing knowledge in the treatment of primary tuberculosis.

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County Society Reports

McCracken

Correspondence read at the March 27 meeting of the McCracken County Medical Society included a group solicitation from the Bear Grass Girl Scout Council, requesting a contribution to help cover a current budget deficit.

A motion passed to request the Board of Education to install a telephone at the stadium ticket office for doctors.

Discussion ensued relative to a speakers bureau that would recommend speakers to civic organizations and clear medical society announcements. It was decided that a committee be appointed to study the problem and report back to the society.

A report was made on the polio vaccine publicity campaign, stating these ways in which the campaign might be furthered: (1) patients acquainted with program during office visits, (2) pamphlets sent to patients along with doctor bills, (3) posters set up in the doctor's office, and (4) notices put in the local newspaper.

A motion passed to obtain Pamphlet #27 from the Polio Foundation for distribution to physicians and through them to their patients.

Further discussion dealt with the fee for polio vaccinations. A motion carried that the Society go on record as recommending the vaccinations and that a minimum fee be charged for the service.

Vernon D. Pettit, M.D., Secretary

HARLAN

John R. Stewart, M.D., chairman of the American Board of Surgery, was guest speaker at the March 30 meeting of the Harlan County Medical Society, Harlan. Dr. Stewart gave an interesting paper on surgery in the older age group.

Philip J. Beagley, M.D., Secretary-Treasurer

LETCHER

Donald P. Conwell, State Department of Health, Louisville, held his audience spellbound for 1½ hours as he spoke on "Medicine and Living in the Belgian Congo" at the April 30 meeting of the Letcher County Medical Dental Society, which was held at the Whitesburg courthouse.

It was the unanimous vote of the Society to recommend the names of A. B. Carter, M.D., Fleming, and J. E. Crawford, M.D., Whitesburg, to the Commissioner of the State Department of Health to fill the vacancies caused by the death of T. R. Collier, M.D., Whitesburg, and D. V. Bentley, M.D., Neon.

The Society voted to contribute \$50 to the "Dr. T. R. Collier Memorial Fund."

R. Dow Collins, M.D., Secretary

William M. Petty, M.D., formerly of Elkton, has announced his plans to return to his native Louisville to enter private practice. A graduate of the University of Louisville School of Medicine in the Class of 1952, Doctor Petty opened a practice in Elkton following two years of active duty in the Air Force during the Korean War. He also served three years during World War II as a B-17 pilot.

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News Items

Gant Gaither, M.D., retired Hopkinsville surgeon and former president of the KSMA, was guest speaker on Good Friday at the luncheon meeting of the Madisonville Kiwanis Club. A lay leader in the Episcopal church, Doctor Gaither spoke on "The Might of Memory."

Maurice Rabb, M.D., Louisville physician and anesthesiologist, was named president of the John A. Andrew Clinical Society at the close of the group's annual meeting at Tuskegee Institute. Doctor Rabb is a graduate of McHarry Medical College at Nashville.

Medical Care Program for Military Dependents (Continued from Page 540)

The Kentucky Physicians Mutual, as fiscal agent, reproduced the fee schedule and prepared a "physicians manual" describing eligibility, dependents identification, authorized services and claim procedures. A copy of the fee schedule and Physicians Manual was mailed to all licensed physicians in Kentucky. Claim forms were supplied the hospitals and physicians notified through the secretary's letter they could be obtained at their hospital.

The Physicians Manual describes in detail the procedure to be followed by physicians in obtaining payment for services rendered under the act. Since most physicians will have only a few medicare pa-

tients, it is suggested that your offices keep the manual on file and refer to it when preparing statements under the act.

When a patient requests the services of a private physician at government expense under the law, the patient is required to present appropriate identification. The physician or his office should complete all applicable sections of the statement and obtain the necessary signatures of the dependent or sponsor. The certification of the physician should be executed and two copies of the statement mailed to the Kentucky Physicians Mutual. If the statement has been prepared properly, payment will be made within a week or ten days.

The biggest single difficulty encountered in the administration of the fiscal agent's portion of the program has been interpreting the schedule for prenatal maternity care. The government accepts no liability for any care rendered prior to December 7, 1956, or subsequent to the discharge of a serviceman. The allowance for prenatal care is broken into trimesters and fractional trimesters and has been somewhat difficult for physicians and Blue Shield to compute. Physicians can help considerably if they will indicate the date of delivery on the statement form.

Considering the fact that it is a new program, it is our opinion that it is going fairly well; that it will become easier for physicians and their offices as dependents become better informed and physicians become more familiar with the program.

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Kentucky Ob. and Gyn. Society Selects Dr. Liebman

Joseph H. Liebman, M.D., Frankfort, was elected president of the Kentucky Obstetrical and Gynecological Society at its 10th annual meeting Saturday, April 27, at the Brown Hotel in Louisville, according to V. Ed Masters, M.D., Louisville, who was renamed secretary-treasurer.

Retiring President Robert A. Orr, M.D., Mayfield, presided at the meeting which was attended by some 40 members.

Guest speaker was J. Ed Pearce, editorial writer for The Courier-Journal, whose topic was "The Layman Looks At the Doctor."

The feature presentation, on "Problems of Transverse," was given by Carl Shelton, M.D., chief of the Department of Obstetrics, Women's Hospital, and professor of obstetrics and gynecology at Wayne University, Detroit, Mich.

Other scientific papers were read by C. J. McGruder, Jr., M.D., resident in obstetrics at Louisville General Hospital, and three members of the staff at the University of Louisville School of Medicine: W. O. Johnson, M.D., head of the Department of Obstetrics and Gynecology; Ab Loveman, M.D., associate professor of dermatology, and James Parker, M.D., assistant professor of pathology.

Ft. Knox Conference Was May 21

Second U. S. Army civilian consultants, hospital commanders and members of their medical staffs participated in a two-day conference at Fort Knox May 21, Col. Francis P. Kintz, Second Army surgeon, has announced.

The Fort Knox meeting was devoted to the furtherance of professional relationships between civilian consultants and military personnel, the evaluating of professional standards of medical care in Second Army treatment facilities and advances in procedures, techniques and drugs.

Dr. Flannery Heads Flood Assn.

M. D. Flannery, M.D., Pikeville surgeon, was named president of the Big Sandy River Flood Control Association at a meeting at Pikeville in April, attended by approximately 10,000 persons from Eastern Kentucky.

The Association will seek to control flood waters on the Big Sandy, Kentucky and Cumberland Rivers and is currently working toward the realization of three reservoir projects on the Big Sandy. A native of Kentucky, Dr. Flannery was graduated from Loyola University Medical School, Chicago, in 1916.

Dr. Collier Memorial Planned

Funds are being received by a group of Whitesburg citizens, under the chairmanship of B. C. Bach, M.D., for the erection of a monument at the grave of the late Thomas R. Collier, M.D. "It is an opportunity," said Dr. Bach, "to contribute to the memory of a man who...literally gave his life for the people of Letcher County."

New KSMA Members

The following physicians have been added to the KSMA membership roster:

William A. Johnson, M.D., Owingsville.

Ruth T. Sanders, M.D., Cumberland.

John T. O'Neill, M.D., Arlington.

Henry C. Evans, M.D., Harlan.

Henderson Host At May 2 Second District Meet

The annual meeting of the Second Councilor District was held at the Henderson Country Club, Henderson, Tuesday, May 2. Walter L. O'Nan, M.D., Henderson, is councilor.

The program included an address by the president of the Association, Richard R. Slucher, M.D., Buechel. The scientific part of the session was an illustrated lecture given by H. Lester Reed, M.D., Louisville.

Willis B. Blue, M.D., Henderson District president, presided at the Henderson meeting, while Donald A. Cantley, Jr., M.D., Henderson, secretary of the district, handled arrangements.

Knoxville Academy of Medicine Reaches Century Mark

The 272-member Knoxville Academy of Medicine, organized March 20, 1857 with five Knoxville physicians, is celebrating its 100th anniversary.

The first of three special birthday events, a reception at the Tennessee Student Center, was held March 20. A centennial scientific program was planned at Deane Hill Country Club, Knoxville, on May 21 and plans are being made for a dinner-dance in the fall.

The Journal of the Tennessee State Medical Association devoted much of its March issue to features highlighting the historical background, growth and achievements of the 100-year-old academy.

U. of L. to Take 100 Students

The University of Louisville School of Medicine will limit freshman classes to 100 students next fall, Dean J. Murray Kinsman, M.D., has announced. The school intends to stick to that figure in the future because there just isn't room for more students, he said.

Dean Kinsman also announced that more out-of-state students would be accepted for next year. In September's freshman class there will be 15 from other states, as compared with nine this year.

Middleburg Honors Dr. Creech

Chester B. Creech, M.D., 75, Middleburg, physician for 50 years, was honor guest at a "Dr. Creech Appreciation Day" held recently in Casey County. Many of the more than 3,000 babies Doctor Creech has delivered during the past half-century came to the Middleburg celebration.

Among the various gifts he received were a watch from members of the Casey County Medical Society and a 47-year-service pin from the Masonic Lodge.



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Meanwhile, Solomon and Johnston stated, *"in the staphylococcic and streptococcic infections, other than pneumonias, without exception the results of treatment with erythromycin were excellent."*³

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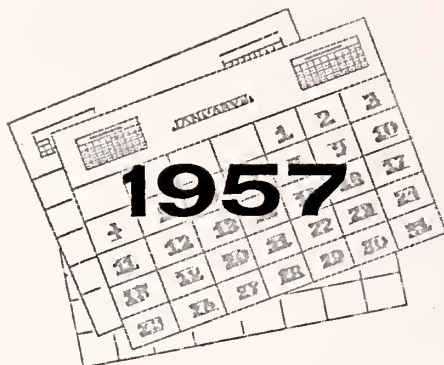
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1. Herrell, W. E., Erythromycin, Antibiotics Monographs, No. 1, p. 34, New York, Medical Encyclopedia Inc., 1955. 2. Eastman, G., Cook, E. and Bunn, P., N. Y. State J. Med., 56:241, 1956. 3. Solomon, S. and Johnston, B., Amer. J. Med. Sc., 230:660, 1955.

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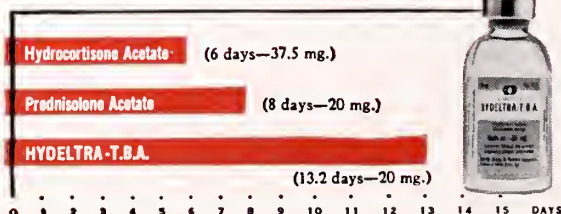
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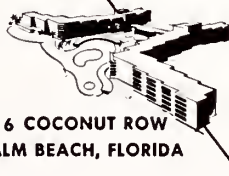
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THERE'S some mighty shrewd wisdom in what Joe says. But human nature being what it is, far too many of us still seek medical advice from those who aren't qualified to give it.

No matter what's bothering you . . . constant fatigue, nerves on edge, recurring aches and pains . . . it is never wise to stay away from your doctor

in the hope that you'll run into somebody who will know "just what's best" for your trouble. In fact, it's often dangerous to accept an amateur's "sure cure."

Seek a friend's advice, if you wish, on almost any other problem. But when it comes to your health, and that of your family, by all means don't let anyone other than a physician advise you.

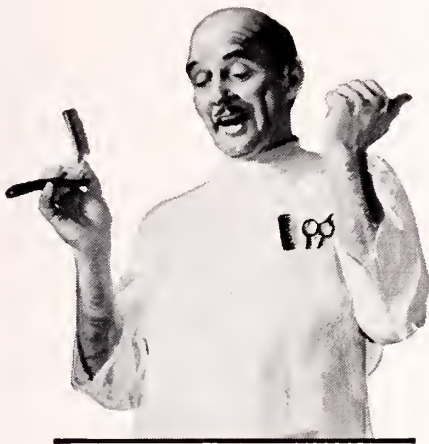
By seeing your doctor at the first sign of trouble, you will not only avoid the hazards of amateur medical advice, but chances are you will save time and money in the long run. In fact, prompt and proper medical care may well turn out to be one of the biggest bargains ever to come your way

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Like all ads in the colorful P-D series, we believe this latest message will give your patients and prospective patients a better understanding of the importance of *prompt* and *proper* medical care.

PARKE, DAVIS & COMPANY

Detroit 32, Michigan

* This advertisement appears in the June 17th issue of Life: circulation more than 5½ million; total readership, over 15 million.



assure her

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Cyclizine Hydrochloride and Pyridoxine Hydrochloride

because

'Maredox' gives the expectant mother new-found relief from morning sickness.

*relieves nausea and vomiting
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counteracts pyridoxine deficiency* } *in pregnancy*

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Pyridoxine Hydrochloride 50 mg.



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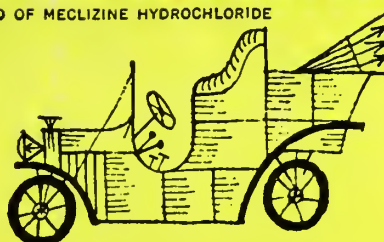
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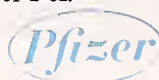
provides added certainty in antibiotic therapy particularly for that 90% of the patient population treated in home or office..

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- to correct many common anemias
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Each teaspoonful (5 cc.) supplies:

Elemental Iron	38 mg.
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Vitamin B ₁₂ activity concentrate	4 mcg.
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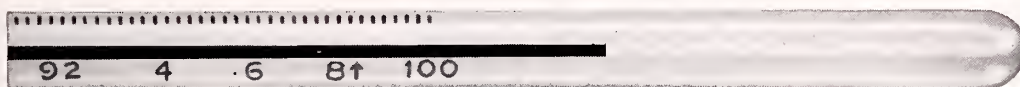
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can you read this thermometer,



doctor?

Naturally not. Missing calibration makes it worthless.

Equally useless and dangerous is a "quantitative" urine-sugar test that does not quantitate dependably, or omits readings in the critical range.

Enzyme urine-sugar tests are sensitive and specific for glucose—excellent "yes" or "no" tests but undependable for quantitation. King and Hainline,¹ after testing 1,000 urines, found an enzymatic urine-sugar test unable to distinguish in the important range between $\frac{1}{2}$ per cent and 2 per cent or more of urinary glucose. Leonards,² in a report on 4,020 tests, revealed that "...in 502 out of 804 tests the wrong interpretation was made." He concluded that enzymatic urine-sugar testing "...as a quantitative procedure is unsatisfactory and can lead to serious error in the interpretation of a patient's clinical condition."²

Failure to recognize this limitation of enzyme tests may result in incorrect insulin dosage,² and may lead to diabetic complications.

(1) King, J. W., and Hainline, A., Jr.: Commercial Glucose Oxidase Preparations for the Detection of Glucose in Urine, *Cleveland Clin. Quart.* 23:212, 1956. (2) Leonards, J. R.: Evaluation of Enzyme Tests for Urinary Glucose, *J.A.M.A.* 163:260 (Jan. 26) 1957.

reliable readings throughout the critical range—
does not omit $\frac{3}{4}\%$ (++) and 1% (+++)

color
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a 15 year "standard" in urine-sugar testing




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Achro

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 earlier therapeutic blood levels • faster broad-spectrum action.

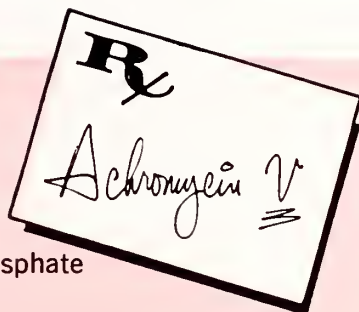
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CAPSULES—Each capsule (pink) contains tetracycline equivalent to 250 mg. of tetracycline HCl, phosphate-buffered. Bottles of 16 and 100 capsules.

SYRUP—Each teaspoonful (5 cc.) of orange-flavored syrup contains 125 mg. of tetracycline HCl activity, phosphate-buffered. Bottles of 2 and 16 fl. oz.

Achromycin V dosage: 6-7 mg. per lb. of body weight per day for children and adults.

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JOURNAL OF THE KENTUCKY STATE MEDICAL ASSOCIATION, JUNE 1957

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Steroid-Nutritional Therapy Is Constructive Approach for the First Signs of Aging

Emphasis on Early Treatment Before "Damage" Is Done

The first subtle suggestions of physiologic deterioration should not be dismissed if serious somatic and metabolic disorders are to be avoided. Prompt institution of steroid-nutritional therapy may forestall and even reverse premature "damage" and help prolong the active life of the patient.

Some of the most common symptoms of declining gonadal function and nutritional insufficiency are vague pains in the bones and joints, easy fatigability, decreased muscular tone, loss of appetite, chronic mental fatigue and general malaise. In older patients, these complaints are frequently indicative of degenerative processes when they cannot be attributed to a specific cause.

The comprehensive formula of "Mediatric" is specifically designed to provide three therapeutic services: 1. *protect* general metabolic integrity; 2. *preserve* physiologic efficiency; 3. *prevent* premature damage.

"Mediatric" supplies estrogen and androgen in small amounts to exert a favorable influence on bone and protein metabolism,¹ restore muscle tone and coordination,² and increase the tensile strength of the skin.³ The two steroids appear to have an additive metabolic effect, while their opposing action on sex-linked tissue minimizes the incidence of untoward reactions.

Dietary supplements, including essential B vitamins and ascorbic acid, ensure adequate nutrition, prevent moderate anemias, and maintain efficient enzyme systems. The mood elevat-

ing effect of a mild antidepressant helps restore emotional stability and increases mental alertness.

Recommended dosages: Male—1 tablet or 1 capsule (or 3 teaspoonfuls) daily, or as required. Female—1 tablet or 1 capsule (or 3 teaspoonfuls) daily, or as required, taken in 21 day courses with a rest period of one week between courses.

Bibliography on request.

"MEDIATRIC"® Tablets and Capsules

Each capsule or tablet contains:

Conjugated estrogens equine ("Premarin"®)	0.25 mg.
Methyltestosterone	2.5 mg.
Vitamin C (ascorbic acid)	50.0 mg.
Thiamine mononitrate (B ₁)	5.0 mg.
Vitamin B ₁₂ with intrinsic factor concentrate	1/6 U.S.P. Unit
Folic acid U.S.P.	0.33 mg.
Ferrous sulfate exsic.	60.0 mg.
Brewers' yeast (specially processed)	200.0 mg.
d-Desoxyephedrine HCl	1.0 mg.
Tablets—No. 752—bottles of 100 and 1,000.	
Capsules—No. 252—bottles of 30, 100, and 1,000.	

"MEDIATRIC" Liquid

Each 15 cc. (3 teaspoonfuls) contains:

Conjugated estrogens equine ("Premarin"®)	0.25 mg.
Methyltestosterone	2.5 mg.
Thiamine HCl (B ₁)	5.0 mg.
Vitamin B ₁₂	1.5 mcg.
Folic acid U.S.P.	0.33 mg.
d-Desoxyephedrine HCl	1.0 mg.

Contains 15% alcohol

No. 910—bottles of 16 fluidounces and 1 gallon.

AYERST LABORATORIES

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Electrical shock and insulin therapy as indicated

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a new dosage form



Compazine[★] Ampuls

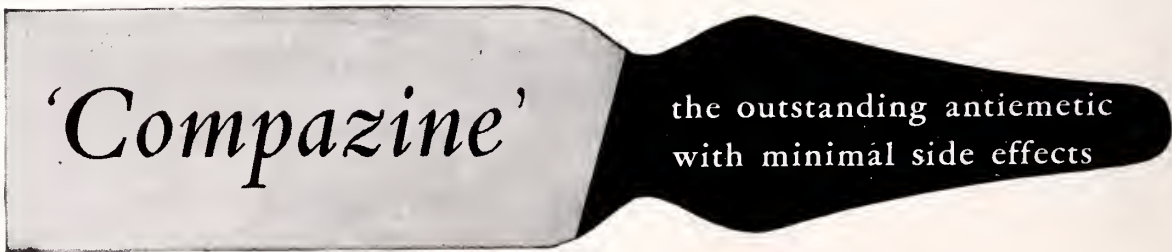
for immediate control of nausea and vomiting
when oral administration is not feasible

In 98% of cases treated with 'Compazine' Ampuls during clinical trials, a single intramuscular dose completely stopped nausea and vomiting or reduced its severity enough to permit tablet administration.

Dosage: An initial dose of 5 to 10 mg. (1 to 2 cc.) should be injected *deeply* into the upper outer quadrant of the buttock. This may be repeated if necessary at intervals of 3 to 4 hours.

For further information, see S.K.F. literature.

Available: 2 cc. (10 mg.) ampuls in boxes of 6 and 100.
5 mg. tablets in bottles of 50 and 500.



'Compazine'

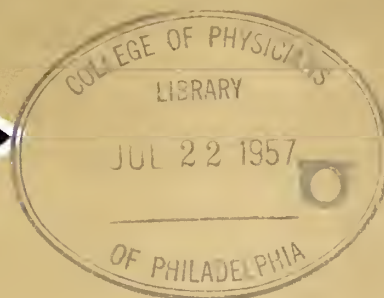
the outstanding antiemetic
with minimal side effects

Smith, Kline & French Laboratories, Philadelphia

★T.M. Reg. U.S. Pat. Off. for prochlorperazine, S.K.F.

THE JOURNAL

OF THE KENTUCKY STATE MEDICAL ASSOCIATION



In this issue:

Carcinoid Tumors

Pott's Procedure for Tetralogy

Physical Medicine and Rehabilitation

MORE CONSISTENTLY CHLOROM

COMBATS MOST CLINICALLY IMPORTANT PATHOGENS

Continuing to prove consistently effective, CHLOROMYCETIN (chloramphenicol, Parke-Davis) has retained its effectiveness against most strains of *Escherichia coli*¹⁻³ and other gram-negative organisms.²⁻⁶ Altemeier reports: "At present, approximately 80 per cent of the gram-negative organisms isolated in our laboratories are sensitive to Chloromycetin."²

A truly wide-spectrum antibiotic, CHLOROMYCETIN is also effective against gram-positive pathogens,^{3,4,7-11} even the troublesome staphylococci.^{3,4,7-11}

CHLOROMYCETIN is a potent therapeutic agent and, because certain blood dyscrasias have been associated with its administration, it should not be used indiscriminately or for minor infections. Furthermore, as with certain other drugs, adequate blood studies should be made when the patient requires prolonged or intermittent therapy.

REFERENCES:

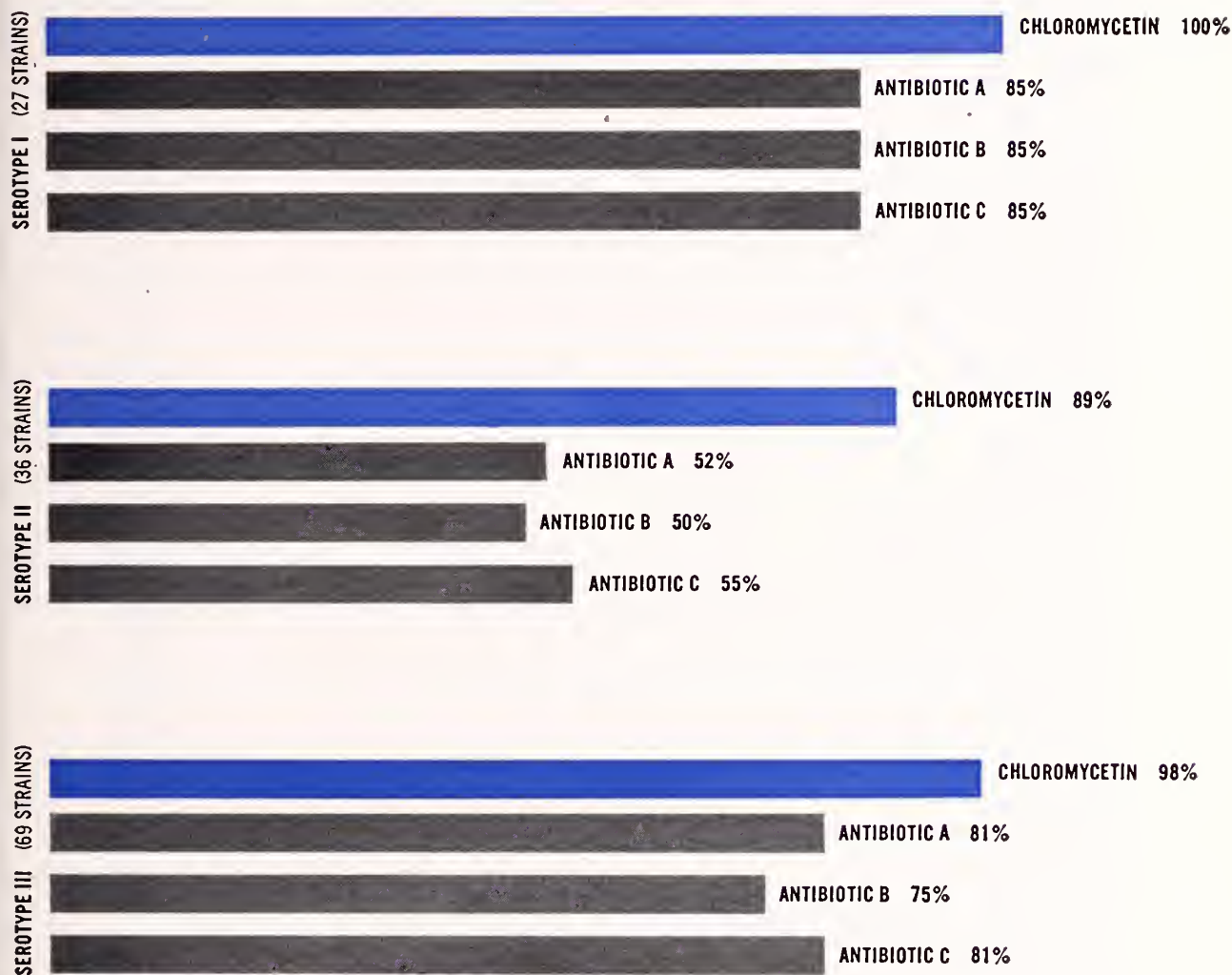
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1. Science News Letter, March 1954

2. Greenblatt, R. B.: Obstet. & Gyn. 2:530, 1953

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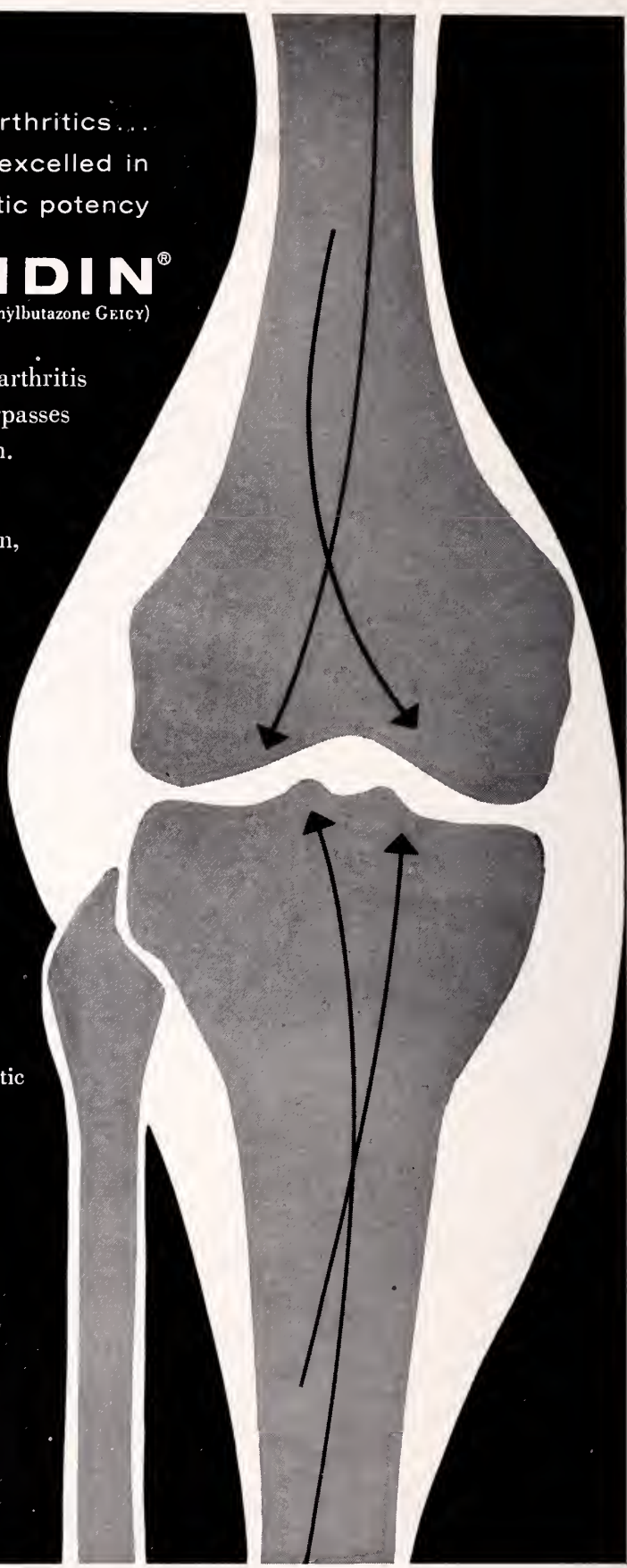
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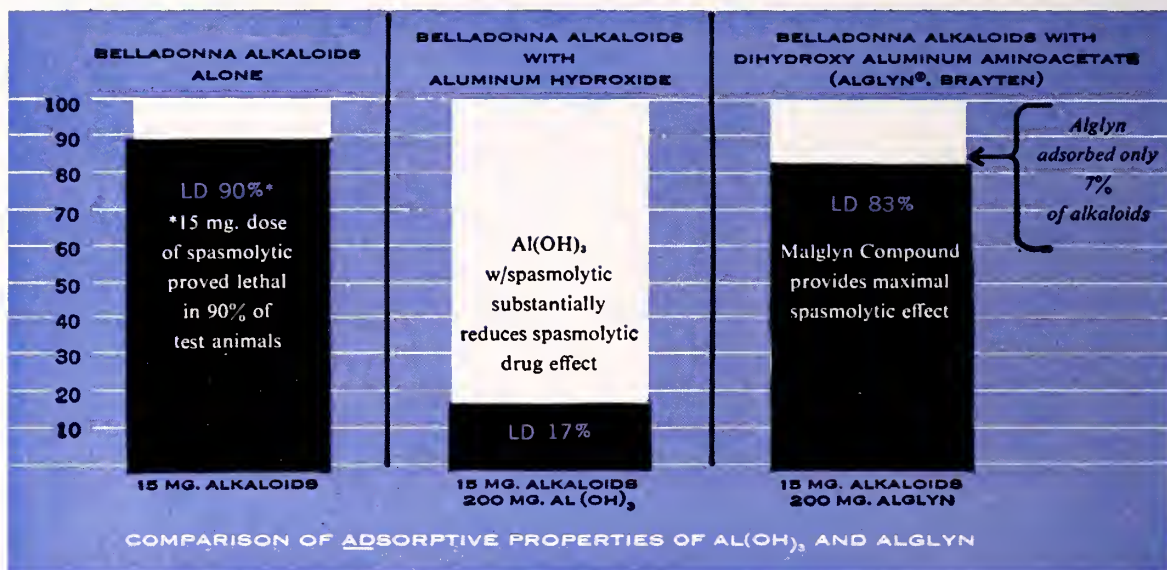
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**message
from
the
President**

The splendid progress made in the service rendered to our members through the improvement of our KSMA annual meeting in recent years is something in which all of us can take great pride. Excellent scientific programs and other features have enabled us now to register approximately fifty per cent of our membership at these meetings, which makes our association rate with the very best.


Those of us who have sought to develop a more worthwhile meeting, however, are conscious of our weaknesses and aware of the criticisms which we feel are valid. For instance, we know that meeting in September as we do, we often have high temperatures that make our meeting rooms uncomfortable. Committee Chairmen are slow, often need frequent proddings, when it comes to getting in the annual reports that invariably come due during the vacation season.

Others feel that the annual meeting should not follow the "vacation let-down" in county medical society activity—that the annual session should follow immediately after the peak of county society efforts. As the need for more effective functioning of organized medicine develops, it would appear every effort should be made to supply the best climate for its operation.

There are other considerations for having our annual meeting in the spring. Those who serve us in the Headquarters Office cannot take vacations at the time most people like to have vacations because they are working overtime in preparation for our annual session. If they wait until after the meeting, children are in school, causing difficult complications.

KSMA Historian, Emmet F. Horine, M.D., tells us that since our Association was organized in 1851, it has held almost as many meetings in the spring as in the summer. Of the seven states that surround Kentucky, only one has a fall meeting. We urge you to give this matter your careful consideration.

R. R. Slucher

A white spoon is shown from a side profile, tilted upwards. Inside the spoon's bowl is a single, bright orange drop, representing a drop of the syrup. The background is dark, and there are faint, stylized leaf-like shapes scattered around.

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oral
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IN THE BOOKS



GENERAL UROLOGY: by Donald R. Smith, M.D.; published by Lange Medical Publications, Los Altos, California; 1957: 328 pages.

This book has been written for the medical student and medical practitioner who have not specialized in urology but whose practice requires a working familiarity with the diagnostic and therapeutic techniques available for the management of the genitourinary diseases and disorders. In order to serve both groups the author has combined both the practical and the theoretical aspects of his subject, Dr. Smith states in his preface. This he has succeeded to do in a splendid manner, and at the very reasonable price of \$4.50.

The author is a urologist of extensive clinical and teaching experience and his teaching methods are well carried out in his text. The book should find itself an excellent reference and refresher work for the busy practitioner, due to the ease of looking up a subject in the index, and to the succinct yet comprehensive material contained in the text.

Coverage of the entire field of genitourinary disease is quite complete and is presented in the practical manner of the working urologist. The chapters on anatomy, symptomatology, and genitourinary examination, usually difficult and dull subjects, are covered in an interesting and readable manner and are excellent.

Criticism can be limited to the small type employed, necessary though it may be in keeping the cost of the book low, but this is compensated for by the clear original drawings and the better than average X-ray reproductions.

Joseph E. Maurer, M.D.

MEDICINE IN CHICAGO, 1850-1950: by Thomas Neville Conner; from the American History Research Center, Madison, Wis. Published by American Book-Stratford Press, Inc., New York, 1957. 302 pages.

The title and subtitle, "A Chapter in the Social and Scientific Development of a City," indicate clearly the subject matter. As stated in the preface, the author justifies his efforts by noting that the study of medical history—Chicago and environs in this case—is essential as a starting point in medical research of all kind.

An exhaustive study of Chicago's medical history has been made and the author applies this to an analysis of medical developments in the city during the century covered. The intensive study on which this treatise is based is briefed in notes, bibliographical sources, and an unusually complete index occupying over 20 per cent of the book.

The author presents his subject in a very readable fashion from cholera and typhoid epidemics, through the effects of the great fire, to the development of the modern hospital. Not infrequently the reader is mired in the details of social and political aspects of medicine, or is left in the air by failure to develop the interesting character of the men who contributed most to medical progress.

All-too-brief mention is made of the Chicago greats: Nicholas Senn, Christian Fenger, Ludvig Hektoen and John B. Murphy. Some of Chicago's outstanding medical scientists of the 1940-1950 era are neglected. The impact of World War II on Chicago medicine and the many contributions of medical men to the war effort have been omitted.

The book holds one's interest poorly but should appeal to those who are interested in medical history and those who have had intimate or long association with the medical world in Chicago.

John Llewellyn, M.D.

THE HAPPY LIFE OF A DOCTOR: by Roger I. Lee, M.D. Published by Little, Brown and Company, Boston, Mass., 1957. 278 pages with illustrations. Price—Cloth, \$4.

Presented in a witty, modest and warmly personal manner, this book is an account of the experiences of an eminent physician through a wide span of years. The author has enjoyed a long successful career rich in accomplishment and friendship. He has been president of the American Medical Association, the American College of Physicians, Professor of Hygiene at Harvard, member of the Harvard Corporation and a founder of the Harvard School of Public Health.

Doctor Lee takes you into his office, to France during World War I, where he served in many important posts with the Harvard Medical Unit; on trips to foreign countries, then back to Harvard and the Massachusetts General Hospital, and finally again to his office where he still enjoys the practice of medicine.

His penetrating analysis of such diverse subjects as overspecialization in medical practice, medical fees, medicine and the Hippocratic Oath, doctors and war, doctors as patients, and of the problem of what to tell the patient, are well presented and will be interesting to most of us engaged in the practice of medicine. His ideas on the "advantages of being fat," while contrary to present-day teachings, may comfort those who choose this physique. Regardless of one's interests, this book will provide delightful entertainment for those of the profession and of allied fields of endeavor.

Grover Sanders, M.D.

Infant Allergies

Infants are not born hypersensitive but may develop hypersensitivity to foodstuffs shortly after birth. The earliest sensitizations are likely to be to milk, wheat, eggs and orange juice, with which contact is established early in life. Heredity is usually a dominant factor in the tendency of infants to develop allergy. Infants with a family history of both paternal and maternal allergy tend to develop clinical symptoms earlier than those with unilateral inheritance. Both the allergen and the symptom in the

infant may be different from those of the father or mother.

Allergic disorders of infants include gastrointestinal disturbances, infantile eczema, urticaria and asthma. Gastrointestinal allergy may be manifested by vomiting, colicky abdominal pain and diarrhea. Allergic dermatitis may be evidenced by wheal-like cutaneous reactions which may develop into exudative lesions over the scalp, face and body. A systemic food hypersensitivity may produce an asthmatic response manifested by dyspnea and wheezing, although infection is usually associated with this type of response.

Common treatments include avoidance of the allergen, desensitization, antihistaminics and, in the presence of infection, antibiotics. Infants sensitive to the proteins of cow's milk whey may be fed human, goat or mare's milk reinforced with KARO® Syrup. Casein-sensitive infants may be offered soybean milk or amino acid mixtures reinforced with KARO Syrup.

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Birth	10	10	2	3	6	320
1	12	13	2½	4	6	390
2	15	13	3	4½	6	480
3	17	9	3	5	5	520
4	20	11	3½	6	5	610
5	23	11	4	6½	5	700
6	26	10	4	7	5	760
7	28	11	3	7½	5	740
8	30	11	2½	8	5	750
10	32	9	2	8	5	760

EVAPORATED GOAT'S MILK FORMULAS

Age Months	Weight Lbs.	Evap. Goat's Milk Oz.	Water Oz.	KARO Tbsp.	Each Feeding Oz.	No. of Feedings in 24 Hrs.	Total Calories
Birth	7	6	12	1	3	6	290
1	8	8	16	2	4	6	395
2	10	9	14	3	4½	5	520
3	12	10	15	3½	5	5	590
4	14	12	18	4	6	5	695
5	16	12	21	4	6½	5	695
6	17	13	22	4	7	5	730
7	18	14	21	3	7	5	710
8	19	15	20	2	7	5	690
10	21	16	16	1	8	4	730

LIQUID SOY MILK FORMULAS

Age Months	Evap. Milk Fluid Oz.	Water Oz.	KARO Tbsp.	Each Feeding Oz.	No. of Feedings in 24 Hrs.	Total Calories
Birth	6	12	2	3	6	380
1	8	16	3	4	6	532
2	9	14	3	4½	5	576
3	10	15	3½	5	4	650
4	12	18	4	6	5	768
5	12	21	4	6½	5	768
6	13	22	4	7	5	796
7	14	21	3	7	5	780
8	15	20	2	7	5	780
10	16	16	1	8	4	764

DRIED SOY MILK FORMULAS

Age Months	Dry Milk	Water Oz.	KARO Tbsp.	Each Feeding Oz.	No. of Feedings in 24 Hrs.	Total Calories
Birth	6	20	2	3	7	360
1	8	22	2	4	6	440
2	9	24	2½	4	6	510
3	10	29	3	6	5	580
4	12	33	3½	7	5	690
5	13	33	3½	7	5	730
6	14	33	3½	7	5	740
7	14	33	2½	7	5	710
8	15	33	2	7	5	720
10	15	33	2	8	4	720

PUBLIC HEALTH PAGE

New Viral Diagnostic Laboratory Opened

RUSSELL E. TEAGUE, M.D.

Commissioner of Health

State of Kentucky

A major problem in effective community protection concerns the rapid diagnosis of acute viral infections. Reliable diagnosis of single cases is not always easy on a clinical basis alone. Yet each viral case represents a community health problem—a potential epidemic.

All general practitioners have turned to the clinical laboratory for help in diagnosing bacterial infections, but with few exceptions the average clinical laboratory has provided little or no help for viral diagnosis.

Recent advances in virology have made many new diagnostic methods for viruses available. The virus laboratory has come to occupy a definite place in the overall plans for maintaining community health. The era has now arrived in modern medicine when the physician no longer needs to rely solely upon his clinical impressions for diagnosis of the many clinical syndromes caused by viruses. With rapid progress made in viral research, the physician may again turn to the laboratory for definitive help in single viral cases or community-wide epidemics.

However, a problem still remains since viral facilities are not usually immediately available to the average physician because the cost of maintaining necessary specialized facilities and highly-trained personnel is prohibitive. Such facilities can best be provided by a public agency such as the Health Department.

It is a pleasure to announce that, for the first time, Kentucky is provided with a complete laboratory for diagnosis of viral diseases.

Beginning in March, the Health Department commenced converting a portion of its laboratories into a viral diagnostic unit. This unit has been operating on a trial basis for the last two months and will assume full-scale operation on July 1.

The new virus laboratory will be under the direction of S. Stephen Chapman, M.D., newly appointed Scientific Director of the Division of Laboratories. Complete facilities are provided for isolation of viruses using tissue culture, animal inoculation, and chick embryo techniques. Serological methods which will be used to characterize isolated viruses include viral neutralization, hemagglutination inhibition, and complement fixation techniques.

The viral diagnostic service will be available to all physicians in Kentucky.

It is hoped that the virus laboratory will not only fulfill an urgent need of help to physicians, but that it will also take a definite place in protection of community health throughout the state.

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PHOBIA	HYPOCHONDRIASIS	TICS	FUNCTIONAL G. I. DISORDERS	PRE-OPERATIVE ANXIETY	
HYSTERIA	PRENATAL ANXIETY	• AND ADJUNCTIVELY IN CEREBRAL ARTERIOSCLEROSIS			
PEPTIC ULCER	HYPERTENSION	COLITIS	NEUROSES	DYSPNEA	INSOMNIA
PRURITIS	ASTHMA	ALCOHOLISM	DERMATITIS	PARKINSONISM	PSORIASIS

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WASHINGTON NEWS DIGEST



Washington, D.C.—The 85th Congress is in the final few weeks of its first session with prospects that it will enact few major medical bills this year, but that next year will be a different story. On at least half a dozen important measures action has been postponed, with the understanding that the issues will be fought out in 1958.

Circumstances prevented any delay on one bill that is of considerable importance to the younger doctors—a new version of the doctor draft act. It had to be enacted by July 1, the Defense Department insisted, or not enough doctors would be available to maintain the military medical services at an acceptable level.

The problem is that the Armed Forces require a higher ratio of physicians to troops than exists between physicians and the general population. Without some special law, the services would either have to make out with fewer doctors than they say they need, or draft thousands of non-physicians merely to obtain the doctors who are in the particular age groups.

This scheme was devised: Amendment of the regular draft act to allow the call up, to age 35, of the necessary numbers of doctors from among those who had received educational deferments; they could be called because they are physicians, not because they are of a certain age. Also, the national, state and local Medical Advisory Committees of Selective Service would be continued, as would a number of provisions in the original act that protect the rights of drafted doctors.

As Congress moved toward adjournment, prospects also were that it would enact a bill to help out some states caught in a financial squeeze because of a new act, passed last year but not scheduled to go into effect until July 1, 1957, to increase federal payments for the medical care of persons on the state-federal public assistance rolls.

Under the old system, states could use the U. S. dollars to pay directly to the individuals for their medical care, or directly to the vendors of medical service—hospitals, physicians, dentists. Many states, adopting the second plan in all or part of their counties, used the federal money to help maintain pooled funds, which support various medical care programs.

All U. S. money paid out under the new act must be used in the form of vendor payments—that is, not turned over directly to the public assistance cases. At the same time, the law as originally passed stipulated that any money received under the old plan henceforth would have to be handled as “recipient payments,” that is, going directly to the persons on public assistance rolls.

A number of states thus faced the prospects of drastically revising their carefully-established medical

care programs or sacrificing large amounts of federal money. Congress came to their rescue by means of a bill that would allow them to use the old money as before, yet take full advantage of the new federal program.

In the closing weeks of the session, however, two major medical bills were making little, if any, progress—those for federal grants to medical colleges to build teaching facilities and for initiating a program of health insurance for federal civilian employees.

A number of bills had been introduced on aid to medical education, representing virtually all the viewpoints in Congress and the administration, but nothing much was happening. Here one factor was the economy drive, which was not too successful in cutting the administration's health budget, yet which virtually precluded any new programs involving large appropriations.

On federal employee health insurance, these longstanding differences of opinion still blocked any compromise: Should emphasis be on basic health insurance, or on major medical (catastrophic) coverage? Should U. S. payroll deductions be permitted, or would this open the door to demands for many other payroll deductions, such as for union dues? What safeguards could be set up to prevent either the commercial insurance companies or the nonprofit organizations (union plans and Blue Cross-Shield) from gaining a dominant position?

On these two major bills, as well as on many others, sponsors were not too discouraged. Already they were making plans to press them still more vigorously next year when Congress, looking toward the fall elections, may be more responsive.

NOTES:

Doctors are asked by PHS to be on the alert for a new type A influenza strain expected to work its way into this country from the Far East. Details from state health departments.

National Library of Medicine officials were still hopeful, as the end of the session neared, that Congress would vote enough money to start constructing the library's new building next year.

For the first time the U. S. contribution to WHO this year is expected to drop to a third of the total WHO budget. In dollars, however, the U. S. share continues to go up, as the charges to other countries.

The Export-Import Bank is making long-term, low-interest loans to some Central American countries to build health facilities, such as hospitals and sewage plants.



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OFFICE PRACTICE OF PHYSICAL MEDICINE AND REHABILITATION*

REX O. McMORRIS, M.D.

Louisville

THE office practice of physical medicine and rehabilitation is limited in the number of procedures that can be carried out because of equipment space requirements, but practically unlimited in the types of conditions in which it can be used. As the conditions to be treated increase in number, the demand for physical therapeutic procedures increases directly. One must approach the situation from the general practice standpoint when discussing the application of these measures in the doctor's office.

There are two types of situations to be considered in the general medical practitioner's office. If his practice requires a great deal of physical or occupational therapy, it would be better to employ his own therapists or refer his cases to a department that has adequate medical supervision. If only an occasional or rare application is indicated, then the doctor himself is obligated to learn those basic techniques necessary in their application.

In the former situation, I cannot emphasize too strongly that the therapist applying his prescription be a well trained and duly recognized person in his or her respective associations. Thus, when a prescription is written, a qualified person who has had adequate training in techniques is available. The prescription should include the diagnosis, parts to be treated, specifications as to procedures to be used, the number and frequency of treatments, special instructions and precautions, outline of home

instructions when indicated, and the date for re-examination.⁵

Assuming that the physician himself will be obligated to apply many of these procedures in his office practice, an attempt will be made to point out some of the more commonly used and simpler procedures that have the widest range of application with the greatest safety.

Diagnostic and Prognostic Procedures

1. The manual muscle test or evaluation produces information as to the extent of involvement in certain neuromuscular disorders and serves to follow the patient's progress in response to treatment. As an example, in poliomyelitis, in addition to evaluating the patient for tightness and tenderness, one can assess the existing weakness, thus following its progression to further weakness or regain of power. The degree and distribution of weakness has considerable differential diagnostic value. The physician's evaluation need not be as detailed and complete as the therapist's to gain the clinical information desired; but, if a physical therapist is available, her assessment has great value because she is ordinarily quite accurate. Upon repeated analyses by the same person, even greater accuracy can be expected.

The grading of muscle strength is an extremely unscientific procedure. Each person will vary in his estimation of strength and the method of recording. The following methods are shown on muscle analysis records in common use today:

100%	5 N	Normal	Complete range of motion against gravity with full resistance.
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*Read at annual joint meeting of the 15th and 12th Councilor Districts of the Kentucky State Medical Association, Cumberland Falls, Kentucky, June 28, 1956.

75%	4	G	Good	Complete range of motion against gravity with some resistance.
50%	3	F	Fair	Complete range of motion against gravity.
25%	2	P	Poor	Complete range of motion with gravity eliminated.
10%	1	T	Trace	Evidence of slight contractility. No joint motion.
0	0	0	Zero	No evidence of contractility. ⁷

2. Low frequency currents have limited diagnostic value but many times are indicated in assessment of peripheral nerve lesions. These electrodiagnostic tests are ordinarily done to support diagnoses of complete denervation, partial denervation, or different stages of re-innervation of muscles. The accurate and detailed analysis in reference to this type of disability requires considerable experience and technical ability and probably more time than the busy general practitioner can devote. But, if he has a galvanic and faradic current source available, the simple R.D. (Reaction of Degeneration) test can be carried out and a certain amount of valuable information obtained.

If a muscle is tested by direct stimulation of its motor point with the faradic current after a lesion has occurred involving its nerve supply, and it does not exhibit any response, then, when stimulated with galvanic current, a slow, sluggish response is obtained, this is substantial proof that the nerve is no longer intact. If, on subsequent R.D. tests, the muscle begins exhibiting less sensitivity to the galvanic current, and then later very weakly begins to respond to faradic current, you have successfully followed this muscle's physiological changes and can predict that it is being re-innervated.

Therapeutic Procedures

There are many diagnostic procedures such as electromyographic studies, skin temperature studies, bodily reactions to certain physical agents, etc., that are too detailed in technique to be adequately performed in the general practitioner's office and will not be discussed.

1. Thermotherapy. Throughout the years, there have been many different procedures recommended for the heating of tissues, and many procedures are in use today. However, there are four primary methods of application which

are most commonly used. Infrared rays, or that heat generated by a lamp with a heat bulb or glowing coil, is the most common type of heat used in treating superficial pathological situations such as myositis, sprains and strains, skin conditions, decubitus ulcers, etc. Shortwave and microwave diathermy are utilized when deeper structures are involved in sprains and strains of joint structures and capsules, peri arthritis, and the various arthritides.

Ultrasonics irradiation is indicated many times in neuritis, involvements of joint structures, and in any condition in which deep heat is indicated. It is sometimes used to help loosen scar tissue and tendon excursion through its sheath. This action is thought to be a mechanical effect.⁴ The fourth method of application of heat is through hydrotherapeutic procedures.

In addition to the above listed specific indications, there are many more, too numerous to mention. There are certain contraindications to the application of heat. In addition to the general contraindications such as hyperpyrexia, walled-off infections, hemorrhagic conditions, malignancy, and anesthetized areas, the use of shortwave diathermy and ultrasonics should be avoided over adhesive strapping or moist dressings, metal implants, in occlusive arterial disease, profuse menstruation, and many times in joints with marked effusion or highly edematous tissue.

Discussion: Infrared can be applied from both luminous and non-luminous sources. The former is more soothing, has its maximum output in the short infrared rays, and is usually the source of choice. The lamp or baker should be applied to the bared part at a distance that produces intense heating of the skin but feels comfortable to the patient.

Shortwave diathermy and microwave diathermy have very specific techniques, and an attempt to outline the various types of application would be folly. One must know his machine, those techniques that apply to his particular apparatus, the patient's tolerance, and the condition to be treated before a technique could be outlined. It has been proved experimentally that all heat applications should be applied for at least 20 minutes and preferably longer.² At 30 minutes much of the heat in a local area is being dissipated as rapidly as it is being produced or induced.

In the application of ultrasonics irradiation, the same remarks apply as those for shortwave

diathermy, but there are some standard techniques that should be carried out in all machines. Applications can be made either as a direct or indirect method. The direct method requires that moist or oily media be placed on the skin and the sound head be kept in contact with the skin at all times. The safest method of application is a stroking application. In the indirect method, one can irradiate a smaller irregular part, such as the circumference of a finger under water at approximately one inch from the surface. The output of the generator must be known and the time limited. Most ultrasonics machines on the market today are pretty well standardized.

A good rule of thumb in most ultrasonics equipment is not to exceed one watt per square centimeter dosage with treatments not ordinarily to run for over 10 minutes. The reason for limiting this type of heat application to ten minutes is because of experimental information showing that prolonged irradiation with ultrasonics can be damaging to bone and nerve tissue.^{1, 8}

Hydrotherapeutic Applications

2. Hydrotherapeutic applications include both the application of heat and cold. Hot or warm baths are usually preferred methods of applying heat to large areas of extremities or the whole body, because of the greater surfaces heated and the possibility of exercise while in the bath. The hot bath, combined with agitation and aeration of a jet of water playing on the part in the form of hydromassage, as in whirlpool and Hubbard tank baths, seems to produce greater effect in relaxing muscles, loosening joints and relieving pain. Short fevers can be induced, when indicated, in full length baths by submersion in water at 101° to 102° F. for 30 minutes. This is not recommended in the aged or debilitated patient. Local parts are ordinarily bathed in water at 102° to 104° F.

In cases where maceration of the skin might contraindicate the use of water, paraffin baths can be used for heating local parts. Paraffin, heated in a double boiler until melted and let cool until a fine film forms over the top, will be tolerated by normal skin when a part is dipped in and rapidly withdrawn. Repeated dippings will soon produce a heavy coating of warm paraffin which retains heat for twenty to forty

minutes. This is a convenient home application in the absence of a ready hot water supply.

Hot packs, prepared by heating woolen cloth in water to the boiling point, wrung very dry, applied as quickly as can be tolerated, and then insulated, serve as a very efficient method of heating local areas. Applications of both cold and heat are utilized in contrast baths. Immersion of local parts in hot water at temperatures of 102° to 104° F. for four minutes, then immediate immersion into cold water at 60° F. for one minute, and alternating this process for thirty minutes, will produce a very marked hyperemia with minimal edema. This procedure is also very easily adapted to the homebound program.

The application of cold alone is used primarily for its analgesic effects in non-surgical manipulation of joints and is not a common clinical procedure at this time. Controlled clinical experimentation is now being carried on throughout the country.

3. Light therapy. Light therapy, as interpreted today, primarily indicates the application of ultraviolet light; and it remains of considerable value for its general tonic effect and in certain dermatological conditions. There is very little indication for the systemic irradiation with ultraviolet light in our present well nourished society. However, one must remain aware of the value of this agency relating to the metabolism of sterols and Vitamin D production in the treatment of rickets.

Ultraviolet still has a certain amount of value in the treatment of acne vulgaris, neurodermatitis, eczema in infants, seborrheic eczema, psoriasis, furunculosis, folliculitis, pityriasis rosea, erysipelas, and lupus. Since the advent of advanced chemotherapeutic and surgical treatment of tuberculosis, it is very rarely used in extra-pulmonary tuberculosis.

In relation to the technique of application of ultraviolet light, one must know the output of his lamp and establish the distance from the part and the time of exposure necessary to produce a minimal erythema dose. This minimal erythema dose can be established by utilizing a cloth sleeve over the inner aspect of the forearm of a medium complexed person; then, by exposing the surfaces of the arm through apertures cut in this cloth, one can irradiate the first opening for 15 seconds, the next for 30 seconds, and so on, up to two and one-half

minutes with the lamp kept at exactly the same distance for each exposure.

By inspection of these irradiated areas after 12 to 24 hours, one can determine the minimal erythema dosage of the lamp by the skin reaction.³ Once this is established, one can irradiate the surface of the skin with safety by increasing the minimal erythema dosage by one M. E. D. once in each 24 hours, building up to a maximum irradiation of approximately 10 to 15 times the M. E. D. of the lamp.

4. Electrotherapy. The primary and simplest procedures in electrotherapy include muscle stimulation and iontophoresis. The consensus of experimental and clinical physicians, as indicated in the literature since 1915, is that the stimulation of muscles that have been denervated will retard the rate of atrophy in muscles, keep the muscles in good physiological condition, and prevent advanced fibrosis of the denervated muscle while awaiting re-innervation. In spite of the fact that this procedure will not prevent atrophy and will have no influence on the rate or extent of re-innervation of a muscle, the above beneficial effects make it a recognized therapy in peripheral nerve lesions.

Iontophoresis is the deposition of medicinal ions into and upon tissues of the body for therapeutic purposes and is used, to a limited extent, in physical therapeutic measures. Vasodilating substances, such as acetyl-beta-methylcholine chloride or mecholyl, can be deposited into the tissues and cause a very marked local vasodilatation effect. In selected myositic conditions, painful paresthesias, and some dystrophic problems, such as Sudeck's atrophy or early shoulder-hand syndrome, the utilization of Novocain® iontophoresis sometimes has proven of great benefit, causing a transient anesthetic effect in the skin which allows early mobilization of parts. The detailed technique of these procedures can be found in Krusen's Physical Medicine text.⁷

Mechanotherapy

5. The primary subdivisions of mechanotherapy are massage and exercise.

Massage is ordinarily used following the application of heat to assist in relaxation of muscles and the return flow of peripheral blood. Massage should be used discriminately in application to people with active rheumatoid

arthritis. It should not be employed in the presence of marked rise of temperature in the region of the affected joint. As a rule, direct massage over the joint is to be avoided, although extremely light stroking may be employed at times to relieve pain. As the inflammation subsides in the joint, the intensity of stroking and kneading of the muscles and soft tissue around the joint, above and below, may be increased gradually in an attempt to improve circulation and relieve pain, and primarily to prepare the muscles for the exercises that ordinarily follow.

The primary types of massage utilized in medicine are effleurage, petrissage, and friction. Effleurage consists of either light or deep stroking, whichever is indicated in the particular condition being treated. It is usually applied in a centripetal direction to assist venous return and assist in lymph drainage and is the best method for causing relaxation of muscle. Petrissage is a deeper and heavier type of massage called kneading. Kneading should be applied primarily to the muscles and can be performed in a wringing or squeezing method, and is also used in preparing the muscles for the exercises to follow. Friction massage is indicated many times to assist in loosening scar tissue, to help soften so-called fibrositic nodules, and to assist in mobilizing joints.

Exercise is one of the most important procedures in physical medical programs. Its indiscriminate use, however, is sometimes very definitely hazardous in acute conditions. Outside of some specific techniques, it should be applied slowly through the fullest possible range short of marked pain and in controlled dosage.

Passive exercise, that is performed by a second party, has limited use except in maintaining and increasing joint range and in attempting re-education of inactive muscles. When enough strength has been gained and the re-education is successful, then the program can go on to active assistive exercises which are voluntary movements of lifting the part against gravity with only enough assistance from a second party to carry the joint through the fullest possible range. As used in conditions where gain in range of motion is desired, the assistance is usually continued a little beyond the completely pain-free range to a tolerated point.

Active exercise is prescribed when the objective is gaining strength as well as range of motion. As indicated, this consists of lifting the

weight of the extremity against gravity through full range of motion. Exercises designed primarily to strengthen muscles are the progressive resistance type. This system of exercise enables one to actually measure the increase in strength of muscles. By determining the maximum weight that can be lifted through full range of joint motion 10 times in succession, but not 11, one has a value which is considered that particular muscle or muscle group's 10 repetition maximum, or 10 R.M. This measured weight is then broken into three or four fractions, and that particular muscle or group of muscles is subjected to ten repetitions per fraction.

For example, the patient is asked to lift the total weight 10 times; three-fourths of the total weight is lifted 10 times, one-half lifted 10 times, and then one-fourth. This requires 40 repetitions at each exercise session. These exercises should be carried on for approximately one week for each muscle group and a new 10 R.M. determined each week. In clinical studies, there has been shown a graphical increase in strength of normal muscles of approximately 60% over a 12-week period.⁶

The types and dosage of exercise to the various pathological conditions must necessarily be controlled by the degree of activity of the disease. Home programs must be specifically written as to the type, number of repetitions of each exercise, and the number of sessions per day. Ordinarily, if one actually fatigues a muscle or muscle group once every 24 hours, it is thought sufficient.

Gait training must be considered a part of exercise, and in some selected cases can be started before full weightbearing is indicated by the use of walkers, parallel bars, or crutches. When sufficient flexion and extension has been acquired in involved joints and strength in the muscles of weightbearing extremities, and the various inflammatory processes are quiescent, training in walking, stairclimbing, and other ambulant functions can be started.

6. Assistive Apparatus. Many times assistive apparatus must be used in gait training as in other physical functions. There are many deformities or muscle weaknesses which make it necessary to apply braces for purely functional purposes. However, there is a very serious tendency in medicine to overbrace various disabilities rather than not apply enough bracing. The various methods of bracing the many func-

tional disabilities will not be discussed; however, one must be cognizant of what a particular part of the body being braced does to the body mechanics of the remaining normal parts.

Above all else, careful attention should be given to the prevention of deformities. With a little care, prevention frequently is possible. With neglect, marked deformity is frequent. Once deformities have developed, it may take years to correct them and may require surgical release.

Splints are an important aid in preventing contractures. This is probably the most essential phase of home treatment. If the patient is bedridden, he should lie on a bed that does not sag. Several times during the day he must lie without pillows and with all joints fully extended. Posterior splints and other light splints which hold an extremity in extension often prevent potential flexion deformities. The most common cause of flexion deformities is the pillow under the knee. Padded cockup splints with the wrist in dorsiflexion frequently may be used to prevent flexion contracture associated with wrist drop. The use of sandbags, right angle splints, or pillows to prevent toe drop and to keep the foot in slight pronation is very important. Good nursing care, following strict hygienic patterns and with avoidance of pressure over denervated skin, will prevent the formation of most decubitus ulcers.

7. Occupational Therapeutic Procedures. Occupational therapy used as an active, passive, or resistive exercise with an objective goal will accomplish much physically while the patient is mentally occupied. Many times the psychological effect of these activities is the primary therapeutic effect desired. Projects that increase the dexterity of the fingers or require the use of the elbows and shoulders while the patient is accomplishing a certain act with a final goal of achievement, are a very good example of what can be done with simple achievement projects. The same principles pertain to medical and technical direction of these procedures, as in physical therapeutics. The interested physician with a certain amount of versatility can ordinarily figure out some type of work that will achieve the desired end result.

8. Activities of Daily Living Therapy. Training in activities of daily living should begin on the first visit and continue throughout the period of treatment. A standardized list of physical

(Continued at bottom of next page)

POTT'S PROCEDURE FOR TETRALOGY OF FALLOT AT FOUR MONTHS OF AGE

HAROLD D. ROSENBAUM, M.D.; RICHARD R. CRUTCHER, M.D., AND
CAROLINE P. SCOTT, M.D.

Lexington

IN 1945 Blalock and Taussig¹ first reported gratifying results from anastomosing a peripheral artery to the pulmonary artery in the treatment of the tetralogy of Fallot. Shortly thereafter Potts and his associates² reported similar success by establishing a direct connection between the aorta and the pulmonary artery. Since that time the value of these procedures has been substantiated by numerous surgeons throughout the world.

Approximately one-third of the patients with tetralogy of Fallot die within the first year of life.³ These patients are cyanotic at birth or shortly thereafter. It is obvious that surgery in these patients carries a very high mortality, be-

cause their anomaly is so severe that life cannot be sustained without operation. Nevertheless, surgery must be seriously considered in these cases. Many clinics, however, have been reluctant to attempt operation on these very small infants because of the high mortality rate. Potts⁴ has performed his shunting procedure on about 350 patients below the age of 3 years with a mortality rate of 15%, whereas his mortality rate is 3.8% in children over this age. This group of cases include about 100 infants less than 12 months of age, and the mortality rate in these patients has been about 20%. At the Children's Medical Center in Boston⁵

(Continued on next page)

(Continued from last page)

achievements is the best method of controlling this program. Essential groups of activities in such a program are bed activities including rolling, turning, sitting in bed, reaching for the toes, bending from side to side, etc. The program can then be graduated on to wheelchair activities, toilet activities, dressing, walking, standing, elevation, brace application, feeding, hand activities, housekeeping procedures, and traveling. If training in these various activities is directed towards achievement within a certain time limit, the patient is usually stimulated to practice more intensively and is more likely to be productive toward independence.

The Final Goal

When one considers the total rehabilitation of the patient suffering a physical disability, a planned program must be participated in by other interested people. We are obligated to consider this patient as a whole man and a segment of society, thus including other services when indicated. Psychological and medical social evaluation, vocational evaluation and training, or any other ancillary service that might be indicated to be of value in this par-

ticular person's problem should be utilized to restore him to as near normal social, vocational, and physical status as is possible in the face of his existing disability.

This makes it obligatory that the family physician be informed of outside resources where these various services can be obtained. Likewise, when a severely disabled person needs a total rehabilitation program, such as that followed in an organized rehabilitation center, it would be well that the physician be informed of local available facilities.

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30% of patients undergoing operation before the age of 3 years have not survived. Of course, mortality rates are even higher in patients under one year of age. It is obvious that a shunting procedure for the tetralogy of Fallot in patients under the age of one year carries a high surgical risk.

The following case is reported to emphasize the excellent result that may be obtained from a Pott's procedure on an infant near death with the tetralogy of Fallot.

Case Report

A.M.C. (#3833-56), a 4 months old white female, was admitted to The St. Joseph Hospital, Lexington, Kentucky, on 6/11/56 with increasing cyanosis and respiratory distress.

The patient was the product of a full-term normal delivery. Physical examination at birth was reported to be negative except for persistent cyanosis. This cyanosis became more intense with crying and feedings. Several minor respiratory infections during the neonatal period also made the cyanosis much more pronounced. In the month preceding hospitalization the cyanosis became profound and was associated with constant respiratory distress. Feedings were taken poorly, and less than one pound of weight had been gained since birth.

Family and gestational history were negative. The patient had three healthy siblings.

Physical examination revealed a deeply cya-



Figure 1

A PA Film of the chest. Note cocked-up apex, diminished main pulmonary artery segment and diminished pulmonary blood flow.

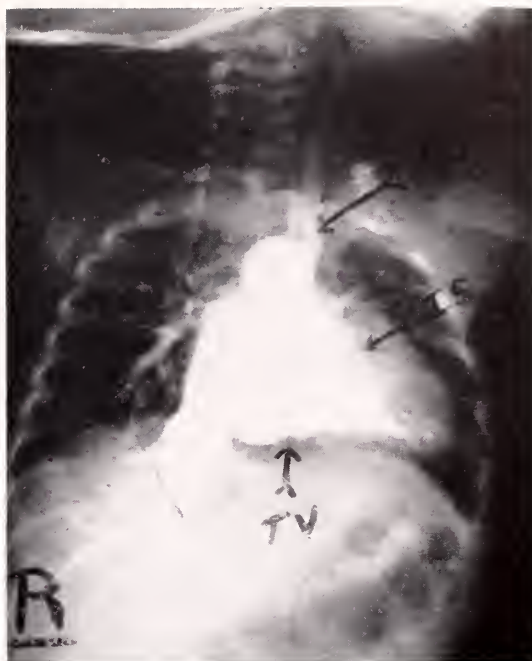


Figure 2

Angiogram in Slight RAO Position two seconds after injection. The aorta and brachiocephalic vessels (Aorta) contain a large quantity of opaque material. The right ventricle is in systole, and the infundibular stenosis (IS) is well shown. Note the tricuspid valve (TV).

notic, poorly nourished infant with labored breathing. Admission weight was 7 pounds, ½ ounce. The heart rate was 130/minute, and the respirations were 30/minute. Both the fingers and toes showed early clubbing. Femoral pulsations, liver and spleen were negative. No chest deformity was seen. The neck veins were not distended, and the lung fields were clear. No thrills were felt. P₂ was louder than A₂, but no splitting was heard. A short, grade II, rough systolic murmur was present along the lower left sternal border. No diastolic murmurs were heard.

Urinalysis was negative. The white blood count was 10,500 with a normal differential. The red blood count was 5,050,000; the hemoglobin 14.0 gms.%; the hematocrit 52%. X-ray examination of the heart (Figure 1) showed no cardiomegaly, but the apex was cocked-up, and the main pulmonary artery segment was diminished in size. Intra-pulmonary vessels were sparse and small.

An electrocardiogram showed right ventricular hypertrophy, probably abnormal even at this age. Angiocardigraphic studies (H.D.R.) revealed an infundibular pulmonic stenosis and early filling of the aorta (Figure 2). Arterial oxygen saturation taken from the left femoral

artery at the time of angiocardiology was only 16%.

A diagnosis of severe tetralogy of Fallot seemed well established. It was hoped that the patient would respond to medical therapy allowing surgical intervention to be postponed until a more favorable age and size had been attained. Unfortunately this did not occur. She continued to take feedings poorly, became more dyspneic and rapidly lost ground. Since a fatal outcome without surgery appeared inevitable a 4 mm. anastomosis between the aorta and the pulmonary artery (Pott's procedure) was performed by one of us (R.R.C.) under a hypothermic temperature of 27° C. on 6/19/56. Her weight was 7 pounds, 3 ounces on the day of surgery.

Except for one episode of acute gastric dilatation the patient did very well following sur-



Figure 3

A PA Film 6 months after surgery.

gery. Respiratory distress disappeared, she took feedings well and rapidly gained weight. The infant has been maintained on prophylactic penicillin since the operation and has had no difficulties. She was last seen six months after surgery (1/9/57) at which time she weighed 13 pounds, 11 ounces and was only moderately cyanotic. A continuous murmur was audible over the entire precordium. The arterial oxygen saturation had risen to 65%, even though the patient was crying and struggling when the blood sample was taken. A chest film (Figure

3) revealed no appreciable change in the configuration of the heart.

Discussion

The preceding case is not reported as a feat of surgical derring-do, but rather the happy result of assuming a high but justified risk in an effort to save this infant's life. The necessity of operating upon some of these patients despite the inevitable high mortality has become apparent. Several clinics are now advising surgery in desperately ill patients regardless of their age or size. Potts⁴ has successfully anastomosed the aorta to the pulmonary artery in one infant 11 days of age, and in another at the age of 13 days who weighed only 4 pounds, 15 ounces.

It should be noted that a Blalock procedure is virtually impossible in so young a subject because of the small size of the subclavian artery. Since about 25% of patients with the tetralogy of Fallot have a right aortic arch it is very important to know the course of the aorta before surgery is undertaken, because a Pott's procedure is impossible if the left chest is opened in a patient with a right aortic arch.

Diagnosis, at times, is very difficult at this age. It is usually possible to determine whether pulmonary blood flow is decreased. Angiocardiology frequently clarifies the diagnosis and is probably indicated regardless of its increased risk in these patients. Surgery should not be withheld when death appears inevitable despite appropriate medical treatment even if some aspects of the anomaly remain in doubt. Relative hypothermia probably decreases the risk of surgery by reducing the patient's metabolic rate during the procedure.

Summary

A case is reported of a 4 months old infant desperately ill with the tetralogy of Fallot treated successfully by a Pott's procedure. We wish to stress the importance of attempting a shunting operation on very small infants near death with the tetralogy of Fallot despite the inevitable high mortality rate.

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CARCINOID TUMORS

ALAN M. BORNSTEIN

History

THE carcinoid tumor, or argentaffinoma, as it is now officially known, is a rare neoplasm of the gastrointestinal tract which, since its first description, has inspired much interest and discussion, and hence is one of those clinical entities which is "more often read about than seen." Langhans, in 1867, described what was probably a carcinoid of the small bowel, but he did not recognize it as such, and Lubarsch is usually credited as the first to describe this neoplasm.³ In 1882, he described a tumor of the ileum which he noted to differ from the usual carcinoma of the bowel by its multicentric origin, its lack of gland formation, the cellular dissimilarity to adeno-

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carcinoma, and its lesser tendency to metastasize. Although Ransom¹⁷ is now credited with the first report (in 1890) of a carcinoid with metastases, for many years after Lubarsch's description this was considered to be a benign tumor, and Oberndorfer, who in 1907 gave the first good histological description of this tumor, pointed out the chromaffinity of the tumor cells, and suggested the name "carcinoid," expressed the belief that it was a benign and harmless tumor.¹¹ In 1914 Gosset and Masson first demonstrated the argentaffin property of the cells of the tumor, and this was confirmed by Forbus in 1925.¹¹

It is only in the past three decades that, because of numerous case reports which have appeared in the literature attesting to an increasing incidence of metastasis from these tumors, which at times were widespread, voluminous, and fatal, that the malignancy of the carcinoid has become fully appreciated. It is now regarded by all as a malignant tumor. The most recent chapter in the history of this neoplasm began in 1953, and has been concerned

with the phenomenon that, in certain patients with extensive metastatic carcinoids, the tumor seems to possess an endocrine function, and to produce profound physiologic and anatomic alterations in other parts of the body; this finding has suddenly focused widespread and renewed interest in this rare neoplasm, and will be discussed in more detail below.

Locations, Histogenesis and Pathology

Carcinoids may arise from any portion of the gastrointestinal tract from the cardia of the stomach to the anus, including the vermiform appendix and Meckel's diverticulum; from the gall bladder, and from gastrointestinal components of teratomas of the ovary and testis. They occur at all ages, the range in reported cases being from 10 days to 89 years.¹⁷ The average age of patients with appendiceal carcinoids is about 30, while the highest incidence of the extra-appendiceal tumors is reported by most authors at 55-60.^{9,14} Some authors state that they occur equally commonly in the two sexes,⁶ while others report a predominance in women.^{7,17} The overall incidence of the argentaffinoma is stated to be 0.14-0.34% of all autopsies,¹⁷ and it is said that 90% of all tumors of the appendix and 20% of all malignant tumors of the small intestine are carcinoids.⁶ Figures based on surgically removed specimens show that one of every 200 to 500 appendices removed surgically contains a carcinoid tumor.^{11,14}

The statistics in the literature concerning the relative frequency of the various sites of origin of these tumors are variable and probably not too accurate, mainly because many cases in which the origin was one of the more uncommon sites have been reported more than once. All authors agree that the appendix is by far the most common site of these tumors, and that the ileum is the second most common. In one large series, only 67% of the tumors arose from the appendix,¹⁷ while other authors place this figure as high as 90%.^{4,11} Of the extra-appendiceal tumors, approximately three-fourths arise from the ileum,⁴ and of the remainder, the rectum is the most common site of origin, 303 rectal carcinoids having been

reported in the literature.⁷ Carcinoids of other organs are all extremely rare, and, according to the most recent reviews available, there have been reported only 39 carcinoids of the stomach,⁹ 28 of the duodenum,² 25 of the colon,⁴ 17 of the cecum,⁴ 13 of the jejunum,⁴ 12 arising from a Meckel's diverticulum,¹³ 6 from teratomas of the ovary or testis,⁴ and 5 from the gall bladder.⁹ It should also be noted that frequently these tumors are multiple; as many as 68 separate primary tumors have been reported in a single small bowel specimen.³

Before discussing the malignancy of these tumors and the reported incidence of metastasis, their origin and pathology should be reviewed. For many years after their first description, the cell of origin of the carcinoid tumor remained in doubt. Aschoff considered them as "mucous membrane nevi", and Saltykow believed that they arose from aberrant pancreatic islet cells.¹⁴ Others likened them histologically to basal cell carcinomas; called them endothelial sarcomas; or claimed that they arose from embryonic neural tissue.¹⁷ However, Masson's careful study of the histology of these tumors both furnished the evidence for their true origin and gave a pathological description of the carcinoid which has not been improved upon to the present time.¹⁰ It had been known long before the work of Masson that, scattered among the cells of the gastrointestinal mucosa, were conical cells with oval clear nuclei, clear homogeneous cytoplasm, and tiny basal granules which had the ability to reduce silver salts and stain black.^{10,22} These cells have been known by many names, but now are usually called the argentaffin of Kultschitzky cells. Masson demonstrated that the cells of carcinoid tumors closely resembled the Kultschitzky cells morphologically, and that they contained identical argentaffin granules; hence he concluded that the tumors arose from these cells. The present evidence supporting Masson's theory of origin of the carcinoid has been summarized recently by Ritchie:¹⁷

1) The Kultschitzky cells and the cells of the tumor are morphologically similar, and both contain granules which give the argentaffin and chromaffin reactions.

2) In man, Kultschitzky cells occur in the epithelium of the gastrointestinal tract from the cardia to the anus, and in the epithelium of the biliary ducts. No carcinoid has been re-

ported as arising from a site in which Kultschitzky cells are not found.

3) More recently, it has been demonstrated that both the Kultschitzky cells and carcinoid tumors secrete a pharmacologically active substance, serotonin.

Grossly the carcinoid tumor, wherever it is found, appears as a firm nodule, rubbery in consistency, and pale yellow on cross section.^{3,18} When metastases are present in the regional lymph nodes or elsewhere, they have the same gross appearance. In the appendix, the tumor usually arises from the tip, and causes a bulbous swelling of the end of the organ, but it may arise nearer the base and hence obstruct the lumen. Carcinoids of the small intestine or rectum are firm submucosal masses which rarely produce ulceration of the overlying mucosa, but may show a variable degree of invasion of the adjacent muscularis and serosa.^{1,9}

Microscopically, these tumors are composed of clumps or sheets of round to polygonal epithelial cells of uniform size and containing round, turgid nuclei. In the cytoplasm are found numerous small granules which give the argentaffin and chromaffin reactions, and will also stain with eosin or iron hematoxylin. Small vacuoles which stain with Sudan and other fat stains are also frequently found in the cytoplasm. In some tumors, groups of cells are found surrounding small cavities filled with colloid, hence forming acini.^{10,17,18} Masson¹⁰ describes three more or less distinct cell types in these tumors, and also notes that the stroma of the tumor is usually scant, but may be abundant, is rich in elastic fibers, and may contain smooth muscle fibers. The most significant feature of the pathology of the carcinoid is the fact that it almost invariably appears histologically benign; the cells and their nuclei are regular and uniform, and mitoses are rare, even though the tumor may have given rise to extensive metastases.^{10,17} Spain²³ also emphasizes the fact that histologically the lesions are the same, whether their behavior is benign or malignant.

As was noted above, the carcinoid tumor was originally considered to be a benign lesion; later numerous reports of cases of metastatic carcinoid appeared. Even now, the issue has not been definitely settled. Some authors still consider appendiceal carcinoids as benign, and MacDonald⁹ even states that when an appen-

diceal carcinoid is found associated with metastases, a search should be made for another primary, since, of all the thousands of cases (of carcinoids of the appendix) that have been reported, only 13 showed unequivocal evidence (by his standards) of invasion and metastasis. This author considers only extra-appendiceal carcinoids as malignant. Diffenbaugh, however, reports a 3.5% incidence of metastases from appendiceal carcinoids, and believes that all carcinoids are low-grade slowly-growing malignant tumors.³ He ascribes the low incidence of metastases from the tumors of the appendix to the fact that they produce symptoms (of appendicitis) early, and hence are removed before time for metastasis has been allowed.

It is more generally agreed that all extra-appendiceal carcinoids should be regarded as malignant,^{6,14} and the carcinoids of the small intestine are usually regarded as the most malignant of all. The reported incidence of metastasis from this site varies greatly in different series, and has been stated to be from 21 to 75%.^{1,3,4,17,23} Carcinoids of the rectum are reported to metastasize in 10-15% of cases,^{7,11} and according to Dockerty,⁴ for rectal tumors larger than 5mm., the incidence of metastasis approaches 50%. The number of reported cases of carcinoids of other organs is too small to make any valid statement about the frequency with which they metastasize, but it should be noted that metastases have been reported from primaries in the stomach,³ duodenum,^{2,3} jejunum,³ cecum,^{3,6,16} colon,³ and Meckel's diverticula.^{6,13} When metastases occur from a carcinoid in any location, they go first to the regional lymph nodes; the second most common site of metastatic involvement is the liver.^{6,14} Any part of the body, however, can be involved by metastases, and, in addition to the above sites, metastases have been found in the peri-aortic and mediastinal nodes, in the bone marrow, heart, pancreas, omentum, spleen, kidneys, adrenals, lungs, ovaries, testes, brain, and subcutaneous tissue.¹⁴

Clinical Manifestations

In practically all of the many cases of carcinoid tumors which have been reported in the literature, the diagnosis was first made at the time of surgical exploration or autopsy. By reviewing the clinical features which some of the patients presented, however, several authors have recently attempted to formulate the clinical

pictures most frequently associated with carcinoids of various sites. The appendiceal tumors are never diagnosed pre-operatively, since the signs and symptoms, when present, are invariably those of acute appendicitis, and in fact are believed due to obstruction of the lumen of the appendix by the tumor inciting an acute inflammation of the organ.¹⁴

Carcinoids of the stomach and duodenum are rarely symptomatic, but occasionally they have produced upper gastrointestinal hemorrhages, and those of the duodenum have in certain cases produced a picture of high intestinal obstruction (vomiting and upper abdominal pain).¹¹ Three cases have also been reported in which carcinoids of the duodenum involved the ampulla of Vater and produced typical obstructive jaundice.² The tumors of the cecum and colon are so rare that no definite syndrome has yet been associated with them, but a few cases have been reported in which the symptoms resembled those of carcinoma (intermittent large bowel obstruction, diarrhea and weight loss), except that there was usually no anemia or melena.¹¹ Rectal carcinoids have usually been discovered on routine sigmoidoscopy, but in a few cases have apparently been responsible for rectal bleeding.¹⁴ Most of the reported carcinoids of a Meckel's diverticulum were found at autopsy, but a few were associated with symptoms of diverticulitis which led to the surgical removal of the diverticulum.¹³

The bulk of the attention given to the clinical manifestations of carcinoid tumors has been directed toward those of the small intestine, because these so frequently behave in a malignant manner and lead to the death of the patient. Occasionally a tumor in this location will give rise to an intussusception, and hence lead to early surgical exploration.²⁶ In most cases, however, the slowly-growing tumor produces symptoms of a recurrent and partial small bowel obstruction, with intermittent episodes of abdominal pain, diarrhea, distension, and weight loss extending over a period of years and gradually becoming more frequent and severe.^{6,23} Because the mucosa overlying the tumor is usually intact, melena and anemia are usually absent.¹¹ It has been emphasized recently that when such a clinical picture is associated with X-ray evidence of kinking of the terminal ileum, with or without the presence of an intrinsic mass, the diagnosis of carcinoid

should be strongly suggested, because, as this tumor extends into the muscularis, serosa, and mesentery, it characteristically leads to the production of fibrous tissue which subsequently contracts and kinks the bowel.^{6,11} Whatever the primary site of the tumor, when extensive metastases occur the signs and symptoms are those of any advanced intra-abdominal malignancy (discomfort in the right upper quadrant, the presence of an enlarged nodular liver, masses in various regions of the abdomen and pelvis, and, terminally, ascites), except that, because of the characteristically slow progression of this tumor and its metastases, the patient may continue to live for years even in the presence of advanced disease.¹¹

Treatment

Because of the difficulty in correctly assessing the malignancy of a given carcinoid tumor, the proper therapy of this neoplasm is not yet a settled matter. The following known clinical facts have bearing on the selection of the therapy for an individual case:

1) All carcinoids are now considered by most authors to be low-grade, slowly-growing malignant tumors.⁶

2) There are no valid histologic criteria for separating the "more malignant" from the "less malignant" tumors, since all appear histologically benign.^{3,9}

3) Local resections of those tumors which appeared grossly to be benign have given apparently complete cures in most cases.^{3,4,6}

4) Because this tumor is almost invariably slowly-growing and compatible with rather long survival, radical palliative resections have been found to be justified even in the presence of extensive metastatic disease.^{4,11,12}

The following are the plans of therapy recommended by most authors for these tumors:

1) The carcinoid of the appendix which is discovered accidentally at laparotomy should be treated by simple appendectomy, together with wide excision of the mesoappendix if the tumor extends to the serosa. In the rare case in which the regional nodes are involved, they should also be excised.^{1,3}

2) The carcinoid of the small intestine which has not extended through the serosa or metastasized should be removed by local resection; if invasion of the serosa or lymph node metastases are present, a wide local resection and lymph node dissection should be done.⁹

3) Carcinoids of the rectum which are smaller than 2cm. and appear grossly benign should be removed by local excision or fulguration; otherwise, too many recta would be sacrificed needlessly. Multiple rectal lesions, annular constricting lesions, all invasive tumors with metastases, and lesions larger than 2 cm. which show local evidence of malignancy (fixation, ulceration, etc.) should be treated radically by abdominoperineal resection.⁷

4) When distant metastases are present, surgery should include resection of the primary lesion whenever possible, together with as much of the metastatic spread as possible, even including hepatic metastases of the large solitary type. Also, when the local lesion is very extensive, a by-passing operation may postpone for years the onset of intestinal obstruction.^{4,6,12} Pearson¹⁴ emphasizes the importance of a frozen section diagnosis of metastatic lesions found at laparotomy, for, if a carcinoid is found, excision is advisable in cases that would be considered grossly inoperable by the usual standards of neoplastic surgery. Such radical resections are very frequently followed by years of comfortable and useful life.^{11,24}

5) Radiation therapy of advanced carcinoids has rarely been attempted, and the reports of the results obtained are too conflicting to be of value.¹⁴

The Carcinoid Syndrome

In 1929 Scholte observed a patient who was found at autopsy to have a carcinoid of the ileum with liver metastases: tricuspid and pulmonary stenosis and endocardial thickening of the right atrium; and generalized telangiectasia of the skin. Although he did not recognize it as such, this was the first well-documented case of what is now known as a "functioning carcinoid tumor" or the "carcinoid syndrome."¹¹ As early as 1928, Masson¹⁰ had suggested that the argentaffin cells of the gastrointestinal tract might constitute a diffuse endocrine gland, and this was confirmed by Ersparmer, who found that these cells secrete a substance known as 5-hydroxytryptamine, more commonly known as serotonin.¹¹ In 1953, Lembeck⁸ extracted a carcinoid which had been removed at post-mortem, and found that it contained large amounts of serotonin. The following year, Thorson and his co-workers²⁴ collected these scattered bits of data and made the first report of a series of cases of this new

syndrome. Their patients had the following clinical and pathological findings:

1) Carcinoid tumors of the ileum with extensive metastases to the liver and elsewhere.

2) Dependent edema, frequent watery stools, borborygmi, abdominal pain, and ascites.

3) Cutaneous phenomena including telangiectasia of the skin; periodic flushes consisting of very intense and sudden color changes of the skin through various shades of redness, cyanosis, and pallor; and the late development of pellagra-like localized brownish scaly thickening of the skin.

4) Valvular lesions, consisting of pulmonary valvular stenosis with or without tricuspid regurgitation and associated during life with systolic and occasionally diastolic cardiac murmurs. In his search for a common denominator for these findings, Thorson suggested that, since serotonin was known to be a pharmacologically active substance capable of producing increased intestinal peristalsis, bronchoconstriction, and marked alterations in circulatory dynamics, the features presented by his patients might be due to the secretion of large amounts of serotonin by the tumors; he believed that this substance, in addition to producing functional changes in the vascular bed (pulmonary and peripheral) and the lungs, might, if sustained over a period of years, give rise also to organic alterations such as telangiectasis, nutritional disorders of the skin, and valvular lesions of the heart.

In a later review which included both Thorson's cases and others, Mattingly¹² elaborated on the symptomatology of the carcinoid syndrome and classified it as follows:

1) Gastrointestinal—diarrhea and recurrent bouts of abdominal pain; the diarrhea is typically the passage of frequent watery or semisolid stools which contain no blood, mucus, or pus, and is believed due to intestinal hypermotility resulting from the effect of serotonin on the muscle of the bowel.

2) Metabolic—rapid weight loss, muscular wasting, cachexia, and weakness.

3) Cutaneous—paroxysmal or persistent erythematous flushing of the skin, predominantly of the face and neck but variable in extent and location; the flushes are often precipitated by eating or excitement; and in some patients could be brought on by palpation of the tumor masses; they are frequently associated with a sensation of heat or tingling of the skin, palpitation, tachycardia, or dizziness.

4) Cardiovascular—progressive exertional dyspnea and fatigability, pedal edema, murmurs of pulmonic stenosis and tricuspid insufficiency, and, terminally, right-sided congestive heart failure.

5) Respiratory—asthmatic episodes, stridor, and constricting sensations in the chest.

Another step in the elucidation of the carcinoid syndrome was the discovery by Sjoerdsma²¹ that patients with this syndrome had abnormally high blood serotonin levels, and that their urine contained abnormally large amounts of 5-hydroxyindole acetic acid, a metabolic product of serotonin. He has used this latter finding to devise a simple qualitative test which can be run on the urine of patients in whom the carcinoid syndrome is suspected.²⁰ Sjoerdsma and his co-workers^{21,25} have also demonstrated by balance and tracer studies that patients with the carcinoid syndrome develop a tryptophan deficiency. This is due to the fact that a large amount of the essential amino acid tryptophan, which is the normal precursor of serotonin in the body, is diverted by the tumor into serotonin production, at the expense of normal protein and niacin metabolism. These authors suggest that perhaps some of the features observed in the carcinoid syndrome are the result of this tryptophan deficiency, and not entirely the result of excessive serotonin production.

Since its description by Thorson, new cases of this syndrome have been appearing in the literature with increasing frequency,^{5,19} and, according to the most recent review, 53 cases have now been reported.⁹ It should be noted that in all those cases in which the primary tumor was identified, it was in the ileum; that no case of the carcinoid syndrome has occurred in a patient who did not have extensive abdominal metastases; and that in only one or possibly two cases was the liver not involved by the metastases.^{12,24}

Summary

An attempt has been made to review the recent literature and to summarize the present knowledge about one of the rarer medical entities, the carcinoid tumor. The locations in which this tumor occurs, its histogenesis, pathology, symptomatology, and therapy have been discussed. A very brief summary has been made of the information obtained about the most recent and undoubtedly the most significant de-

(Continued at bottom of next page)

SCARLESS REPAIR OF UMBILICAL HERNIA IN CHILDREN

HOWARD E. DORTON, M.D.

Lexington

FOR the past three or four years, we have been using a method of repair of umbilical hernia which leaves no visible evidence of an operative procedure having been performed. While this method does not improve the results of the actual repair of the hernia, nevertheless the avoidance of scarring is a comfort to the parents, and to the child as it reaches the age of discernment.

A study of the accompanying illustration shows the skin of the hernia sac being circumcised (1.) at a level which, when the skin is relaxed, will fall flush with the anterior abdominal wall. The hernia sac is isolated, opened and removed in the usual manner. (2.) The sac is closed transversely, care being taken to evert the peritoneum. (3.) This can usually be accomplished by the placement of three or four horizontal mattress sutures of nonabsorbable

suture material through fascia and peritoneum together. The circular skin defect is then closed with a subcuticular purse string suture of fine plain catgut. (4.) The beginning and the end of this purse string suture are placed somewhat more deeply than the remainder of the subcuticular sutures so that when tied the knot lies deep to the margin of the skin. The tails of the suture are then threaded on a needle and the free end of the suture are buried beneath the skin in the manner illustrated. (5.) This method of closure reconstructs a fairly normal appearing umbilicus and obliterates completely any evidence of an operation having been performed.

We have used this method of repair since 1951 on nineteen patients with very satisfactory results.

(Continued from last page)

velopment in the history of these tumors, the fact that they, like the pheochromocytoma and other tumors of endocrine glands, may be truly functional tumors, secreting a hormone which causes profound alterations in body physiology. This last chapter is just in the process of being written at present, and much work remains to be done before all the aspects of this new interesting syndrome will be clarified.

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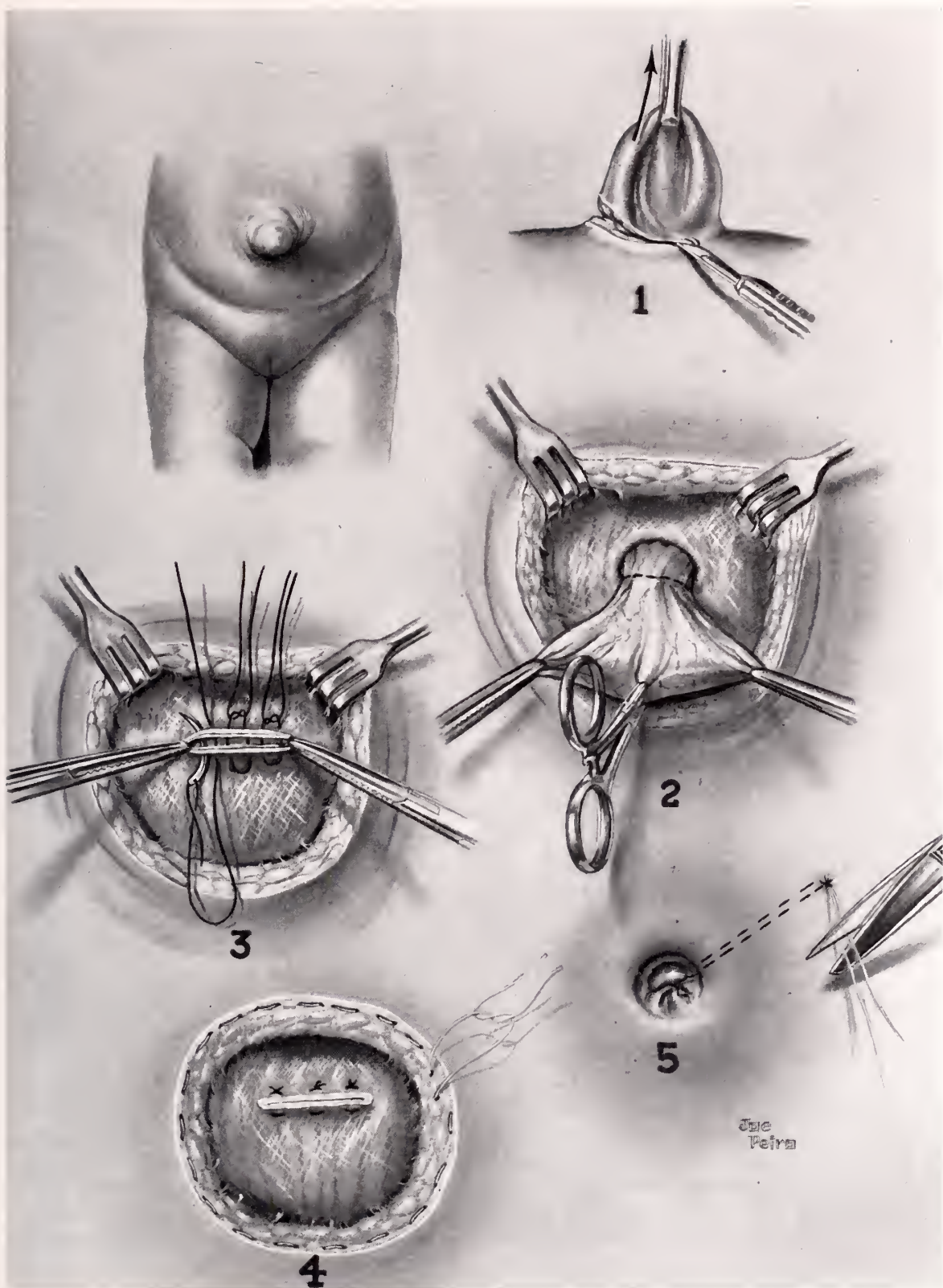
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Scarless Repair of Umbilical Hernia In Children

PHILOSOPHY, JUDGMENT, AND PROSTATIC CARCINOMA

LYTLE ATHERTON, M.D., F.A.C.S AND L. DOUGLAS ATHERTON, M.D.

Louisville

WHAT shall we do with cancer of the prostate? The answer seems relatively simple. When the victim has a small focus, no apparent metastases, and shows some promise of surviving three years or more in the absence of this malady, one proceeds with radical prostatectomy. If the poor fellow has extensive local involvement with or without metastases, or if any of his other vital systems show signs of imminent collapse, one becomes enthusiastic about hormonal therapy and limits surgery to the simplest means of maintaining bladder function. At present it is generally agreed that use of radioactive materials, adrenalectomy, and hypophysectomy is either of questionable value or highly experimental.

However, between these two extremes there is a sizable group of patients in whom deciding operability or non-operability taxes the cerebrum. Since probability of cure from radical surgery decreases roughly as the extent of local disease increases, one hesitates to advise major surgery in such cases in the face of, for example, a defective cardiovascular system, when hormonal therapy will usually assure at least two years of apparent health and comfort. What decision is reached depends largely on the experience and judgment of the urologist and to some extent on the philosophy of the patient.

The Spectre of Incontinence

Further influencing the sometimes difficult decisions above, there is the spectre of a unique and sobering complication. Radical prostatectomy is afflicted with an incidence of some degree of permanent urinary incontinence varying from 1-20% depending on whose series one reads and how the operation is done. Urinary incontinence may be tolerable when it is swapped for freedom from a certain and miserable fatal disease. However, when chances of cure are dropped from 50% to about 10% with carcinomatous invasion of a seminal vesicle and this becomes balanced against a 10% possibility of urinary incontinence, the ledger sheet becomes less admirable.

In all fairness, when a small prostate with minimal carcinoma is skillfully and completely removed by the perineal route the incidence of incontinence is probably not over 1%. In larger prostates, and particularly in those of the nearly inoperable variety, possibility of incontinence is some greater in our experience.

Incontinence is such a thoroughly disagreeable situation to both patient and doctor that even faint possibility of its occurrence will tend to promote the utmost conservatism. Not long ago one of us talked informally with a young urologist only two years in practice, and it was his misfortune to have had five incontinent patients resulting from five consecutive radical retropubic operations. That type of experience, particularly by the young surgeon, is hardly comparable to the really significant palliation offered by stilbestrol. Patients who die are soon forgotten; those with incontinence have a tendency to linger conspicuously. Spirits as well as trousers are irrefutably and often intensely dampened.

The above problems in judgment are obvious, well-understood, and usually freely admitted. There are others of more subtle nature, and among them are those of diagnosis and prophylaxis.

Problems in Diagnosis

The examining finger detects something suspicious of carcinoma and is correct in its supposition about 90% of the time. In the other 10% it is fooled completely by a soft, diffuse malignancy or by a masking benign hypertrophy. In this latter group the diagnosis may be made on tissue removed to relieve obstruction. The decision for radical surgery, complicated now even further, must be made. The operation will be handicapped by post-traumatic cellulitis and infection with alteration of landmarks and cleavage planes.

When the examining finger picks up an induration, in addition to carcinoma, one thinks of various infections—non-specific, calculous, or tuberculous prostatitis. The idea of vigorously massaging carcinoma is generally

scorned, but the fact remains that the induration of prostatitis will often noticeably soften after massage and thereby alleviate any torment of indecision on the part of the masseur. Stones are readily identified by X-ray. Tuberculous prostatitis is usually adduced from other clinical signs and symptoms. With the full knowledge that these may mask an underlying carcinoma and not in themselves be the sole reason for the induration, it is worth trying to deduce the probability of finding coexisting malignancy.

In impressive series of routine autopsies of men over 50 dying of all causes, at least six pathologists have reported an incidence of at least occult carcinoma in from 14-46%. This study even appalled most urologists. It is, in fact, enough to make one suspicious of one's own prostate. At the Brady Urological Institute from 1900-1950, Finkle reported a 14.1% incidence of carcinoma associated with prostatic calculi.

Figures on the association of benign prostatic hypertrophy with carcinoma also fall roughly into this proportion. For instance, Hand and Sullivan reported 13% of 100 consecutive retropubic prostatectomies as showing coincidental carcinoma. At the Massachusetts General Hospital during a 10-year period 648 of 3000 cases of prostatism were associated with carcinoma. Dr. Douglas Scott recorded a 15% incidence of malignancies in 1600 transurethral resections.

These figures, giving a rough idea of the incidence of prostatic carcinoma in the general male population and associated with unrelated prostatic pathology, give us some right to assume that perhaps 14% of palpably indurated prostates explainable on a basis of known infection or stones will actually mask carcinoma. With such a percentage it would seem well worthwhile to establish the diagnosis one way or the other in all such patients over fifty.

Evaluation of Biopsy Methods

The two practical methods for establishing diagnosis are by needle biopsy and by open perineal biopsy. Needle biopsy has the advantages of simplicity and of causing no sequelae, but it has the disadvantage of leaving much to be desired. If the biopsy is positive and other conditions permit, one operates. If negative, one still does not know for certain. We have

found it especially ungratifying for small prostates with small nodules.

Open perineal biopsy, particularly when a pathologist experienced in prostatic frozen section is available, is apt to be much more satisfying since any indurated area can be felt through the open wound and good chunks taken for immediate interpretation. If one feels more secure with permanent sections, then nothing is lost except time, a few days extra expense to the patient, and possibly another procedure.

Open perineal biopsy carries no risk of incontinence. However, the possibility of some degree of impotence following perineal exposure of the prostate is unsettled. Dr. Hugh Jewett at Johns Hopkins seems firmly convinced that the risk of impotency is negligible. Other investigators more recently suggest that if potency is already impaired as often is the case in the older age group, then perineal biopsy may aggravate the situation. In all probability, if impotence is a complication of biopsy, it follows to some degree the extent and trauma of such an exposure.

After open perineal biopsy or after open prostatic surgery for the benign gland, future radical prostatectomy in the event of prostatic cancer is apt to be more difficult and less curative by reason of resulting peri-prostatic scarring. One therefore is tempted, as Dr. G. G. Smith has advocated, to consider total prostatectomy (removal of capsule with prostate, and direct anastomosis of bladder neck to urethra—distinct from radical prostatectomy when a rim of bladder neck and seminal vesicles are also removed) at time of perineal biopsy if the frozen section is negative. This is prophylaxis against cancer and also picks up occult malignancy which is often disconcerting.

Radical or total operation, either perineal or retropubic, is almost certain to cause impotency, and each carries a minor risk of incontinence. Such a decision is a difficult one to make, more particularly if the nodule-bearing patient is asymptomatic to begin with. The degree to which patients can enter into an accurate appraisal of their own problem varies greatly. In general most intelligent people, after a week or two, arrive at reasonable conclusions and make the decision of the urologist somewhat simpler. However, patients who are overwhelmed by fear of cancer, operations, doctor

bills, etc., may make decisions not wholly palatable to them in future years.

Early Diagnosis

Theoretically most cases of prostatic cancer should be curable provided the patient passes a physical examination indicating that he is capable of surviving the operation by two or three years. How, then, do we get rid of the present unfortunate 80-90% of prostatic malignancies with ineradicable local disease? At the present time, as has been ably and repeatedly pointed out, the answer is by early diagnosis.

When the alert and conditioned finger is correct at least 90% of the time, why should there be such difficulty with early diagnosis? Most lay people do not realize and many physicians forget that there are *no* symptoms of early carcinoma of the prostate. By the time symptoms appear the carcinoma has had ample time to become "almost operable" or "nearly inoperable." Secondly, many of our oldsters still cling to the belief that it is quite natural for old men to urinate frequently and with grunts. Other factors which keep the patient from the examining finger are limited financial reserve, stinginess, timidity, inertia, arthritis, scarcity of sympathetic physicians, and even fear and hatred of doctors. None of these would appear insurmountable except possibly the arthritis.

Ideally, then, in years to come (excluding, of course, the invention of an anti-cancer vac-

cine), on certain days of the week a long line of elderly gentlemen will stretch from the front doors of our offices, each one eager to submit to an examining finger, and all reasonably confident of dying of something other than prostatic cancer. It is easy to visualize sequelae of such a program: a subdivision of urology made up of Carcinoma-of-the Prostatologists complete with its own societies, and even a number of hospitals set aside for the care of this large segment of the population served by these special specialists. There would be, of course, yearly prostatic cancer fund drives, if the laity could be persuaded to discuss the subject without blushing. This is one aim of the American Cancer Society and is compatible with our own philosophy. Eventually, if we keep at it, everyone will have the privilege of living forever—if he wishes.

Summary

In summary, we have tried to illustrate the need for and difficulties of good judgment based on the assumption that individual health, happiness, and freedom to make choices affecting his own well-being is proper for our fellow men. Understandably, efforts to acquaint a patient with the several aspects of his complicated problem can influence his decision in several directions. The skill and impartiality with which this is done constitutes one phase of the Art of Medicine.

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ACUTE RHEUMATIC FEVER

Emphasis on Prevention of Initial and Recurrent Attacks

ENRICO D. CARRASCO, LIEUTENANT COLONEL, MC

Fort Knox

ACUTE rheumatic fever and rheumatic heart disease still constitute major serious illnesses even though adequate antimicrobial drugs have been available for over a decade against the streptococcus organism. Rheumatic heart disease remains the leading cause of heart disease in individuals under 40. It is theoretically possible to prevent most of these cases through adequate treatment of streptococcal infections.

The last three patients with rheumatic fever seen at the Ireland Army Hospital had a history of acute pharyngitis 10 days to 3 weeks prior to admission. All had received inadequate therapy of 1 to 4 days duration. In these three cases, heavy growths of beta hemolytic *Streptococcus* were obtained from their throats after admission with rheumatic activity.

Etiology

Rheumatic fever is a generalized systemic disease characterized by widespread inflammatory changes involving the heart, joints, central nervous system and subcutaneous tissues. The etiology, although not known by direct evidence, is probably a hypersensitivity phenomena to the group A, Hemolytic *Streptococcus*. There is much indirect evidence to support this idea. The usual sequence of events that occur is first, a streptococcal infection of the nasopharynx followed by latent periods of 1-3 weeks; then a period of acute rheumatic fever which may vary in duration from a few weeks to as long as 1 or 2 years and finally a fourth period in which there is rheumatic inactivity in an individual who has been sensitized to the streptococcus and who may develop a recurrence of rheumatic fever with each recurring streptococcal infection. In untreated cases of streptococcal pharyngitis, only about 3% develop rheumatic fever as a late complication of the illness. However, once acute rheumatic fever is experienced by a patient, the incidence of recurrence may be as high as 50% following streptococcal infections of the upper respiratory tract.

There are 40 odd types of group A strepto-

coccus and all are associated with rheumatic fever except types 4 and 22. These have been observed in epidemics and found relatively ineffective in causing acute rheumatic fever.¹ In rheumatic fever, approximately two-thirds of the early cases have positive nasal pharyngeal culture for beta hemolytic *Streptococcus* and about 80-100% have elevated titers of anti-streptolysin O and other specific antibodies such as antistreptokinase and antistreptococcal hyaluronidase.

Acute rheumatic fever incidence coincides directly with the seasonal incidence for upper respiratory infections. Rheumatic fever has its onset usually in the age group of 5-15 years; the mean age being 7 years. It is unusual in a child under 3 years of age. Although rheumatic fever is found in all climates, in general the incidence is more common in areas where the climate is cold and wet than in warm, dry areas.

There is also evidence that rheumatic fever occurs most commonly in the poor, underprivileged urban children. The greatest numbers are found in the slums of large cities. During World War II, the high incidence found amongst Army and Navy recruits in large training areas suggests that crowding together of susceptible persons greatly increases the incidence of rheumatic fever.

Pathology

The pathology of rheumatic fever is characterized by a diffuse exudative, proliferative and inflammatory reaction in connective tissues. The early lesion or the exudative phase involves the collagen fibers which undergo swelling and fragmentation and is referred to as fibroid degeneration. The proliferative reaction gives rise to a focal perivascular granuloma which forms the most characteristic lesion of rheumatic fever, the Aschoff body.

Diagnosis

The clinical manifestation of rheumatic fever may vary from only a low grade intermittent fever to the classical features of polyarthritis, carditis, and chorea. Usually in children less than 6 years of age, the presenting symptoms

are those of carditis, and in those over 6, polyarthritis and chorea are the usual presenting symptoms. Because of the lack of any pathognomonic sign or laboratory finding, in acute rheumatic fever a list of major and minor manifestations (modified Jones criteria) is presented.²

One may diagnose rheumatic fever if one major manifestation and two or more minors are present, or if two major manifestations are present. The major manifestations are carditis, polyarthritis, chorea, subcutaneous nodules and erythema marginatum. The minor manifestations are fever, arthralgia, elevated sedimentation rate, leucocytosis, a positive C-reactive protein, prolonged P-R intervals, evidence of preceding streptococcal infection and a history of previous attacks of rheumatic fever.

If the disease cannot be definitely diagnosed as acute rheumatic fever, careful observation should be continued until a diagnosis is made. These patients should be closely observed and treated adequately for all streptococcal infections. Other manifestations of acute rheumatic fever such as weakness, loss of weight, anemia, frequent nose bleeds, abdominal pains and pleurisy or rheumatic pneumonia are occasionally seen.

Laboratory Findings

The laboratory findings include a positive throat culture, an increased erythrocyte sedimentation rate, the presence of the C-reactive protein, leukocytosis, mild-to-moderate anemia and the presence of streptococcal antibodies. The usual streptococcal antibody used is the antistreptolysin O and if this titer is over 200 units, it is considered significant evidence of streptococcal sensitivity. It is not unusual to find titers as high as 2,500 units. The titer usually remains elevated for several months and falls independently of the course of the rheumatic process.

The prognosis after an attack of rheumatic fever is difficult to predict in the individual patient. Jones and Bland report on a follow-up of 20 years on 1,000 patients after a rheumatic attack. Approximately 50% of these patients showed no definite signs of heart disease initially. However, 44% of these patients ultimately developed rheumatic heart disease in the 20 year follow-up. In other words, in this series, approximately 75% ended up with clinical rheumatic heart disease of varying degrees.

The treatment of rheumatic fever consists of

bedrest, together with salicylates, until evidences of rheumatic activity have subsided; then gradual ambulation. Salicylates usually produce dramatic effect within 1-2 days. The dose varies from 2 to 10 grams daily which should be gradually reduced over a period of 6 weeks. If there is recurrence of rheumatic activity, the full dose is again reinstituted and reduced again over an additional 6 weeks or longer.

The use of Cortisone and ACTH has shown excellent results and may be lifesaving in severe pancarditis. Cases of pericarditis have shown rapid resolution with gallop rhythms disappearing within a matter of a few days of therapy. However, these return spontaneously on withdrawal of the steroids prematurely. For Cortisone, a suggested schedule of 300 mgms. daily for 2 days, then gradual reduction over a period of 6 weeks is recommended.¹ If there is a recurrence, it is necessary to reinstitute the dosage of Cortisone. The suggested dose of ACTH is 120 mgms. for 4 days, then gradual reduction over a 6 weeks period.¹

The use of steroids in acute rheumatic fever presents the same undesirable effect as in other illnesses. These include electrolyte, water and carbohydrate metabolism disturbances, hirsutism, abdominal striae, pigmentation and unusual fat deposition (especially around the face) plus the major hazard that the steroids may mask pain or symptoms and signs of infection so that such may be overlooked. The hormone therapy should be reserved for the severe forms of carditis, using salicylates for most cases of rheumatic fever.

Prevention

In the prevention of rheumatic fever, the effort must be directed at early diagnosis and adequate treatment of streptococcal infection. When encountering an acute pharyngitis, the possibility of streptococcal pharyngitis must be borne in mind. The clinical picture varies from a severe pharyngitis with exudate and local lymphadenitis to only a profusely discharging nose with an impetiginous lesion around the nares. The latter is usually found in the very young. Of the children presented to us at this hospital, approximately 15% of acute pharyngitis was found to be due to group A, Hemolytic Streptococcus.

The laboratory aids in diagnosing streptococcal pharyngitis include the throat culture

which is inoculated on 5% sheep blood in infusion agar base that is plated within 1 hour after obtaining the swab from the tonsil areas and posterior pharyngeal wall.⁶ The characteristic colony produces a complete clear zone hemolysis. These cultures are incubated and examined in approximately 24 hours. The total leukocyte count is of value. In general, streptococcal infections rarely have white blood cell counts under 12,000. However, non-bacterial infections of the nasal pharynx may have elevated total leukocyte counts.

When a diagnosis of streptococcal pharyngitis is made or strongly suspected, one of the following methods of treatment should be started. (Throat culture should be obtained before starting treatment).

1. a. Benzathine Penicillin G in a single intramuscular injection of 600,000 to 900,000 units for children and 900,000 to 1,200,000 units for adults.

b. One intramuscular injection of 1,200,000 units All-Purpose Bicillin (Wyeth). (This is a mixture containing 300,000 units Crystalline Penicillin; 300,000 units Procaine Penicillin and 600,000 units of Benzathine Penicillin.) This preparation has the advantage of being less painful locally and some physicians feel that they obtain a more rapid clinical response.

2. Procaine Penicillin with 2% Aluminum monosterate in oil in the dose of 300,000 units intramuscularly every 3rd day for three doses for children and one intramuscular dose of 600,000 units every 3rd day for three doses for adults.

3. Oral administration of Penicillin, 250,000 units three times a day for 10 days.

4. Broad-spectrum antibiotics are useful in

Penicillin sensitive patients, but full doses should be given for a minimum of 10 days.^{3,4}

In the prevention of recurrence of rheumatic fever, the rheumatic individual must be protected from streptococcal infection. All patients who have a definite history of rheumatic fever or have rheumatic heart disease should receive prophylaxis indefinitely. The necessity for adhering to this requirement is relative to the individual risk. Certainly the risk of exposure of the farmer in the midwest is not as great as that of the urban grammar school teacher. The prophylactic methods in order of desirability are listed:

1. Benzathine Penicillin G intramuscularly, 1,200,000 units once a month.

2. Sulfadiazine orally $\frac{1}{2}$ to 1 gram once a day. The smaller dose is used for children under 60 pounds.

3. Penicillin orally in a dosage of 200,000 to 250,000 units twice a day.³

Summary

A review of rheumatic fever has been presented with emphasis on early diagnosis and adequate treatment of streptococcal pharyngitis and the prophylaxis of streptococcal infections in rheumatic individuals.

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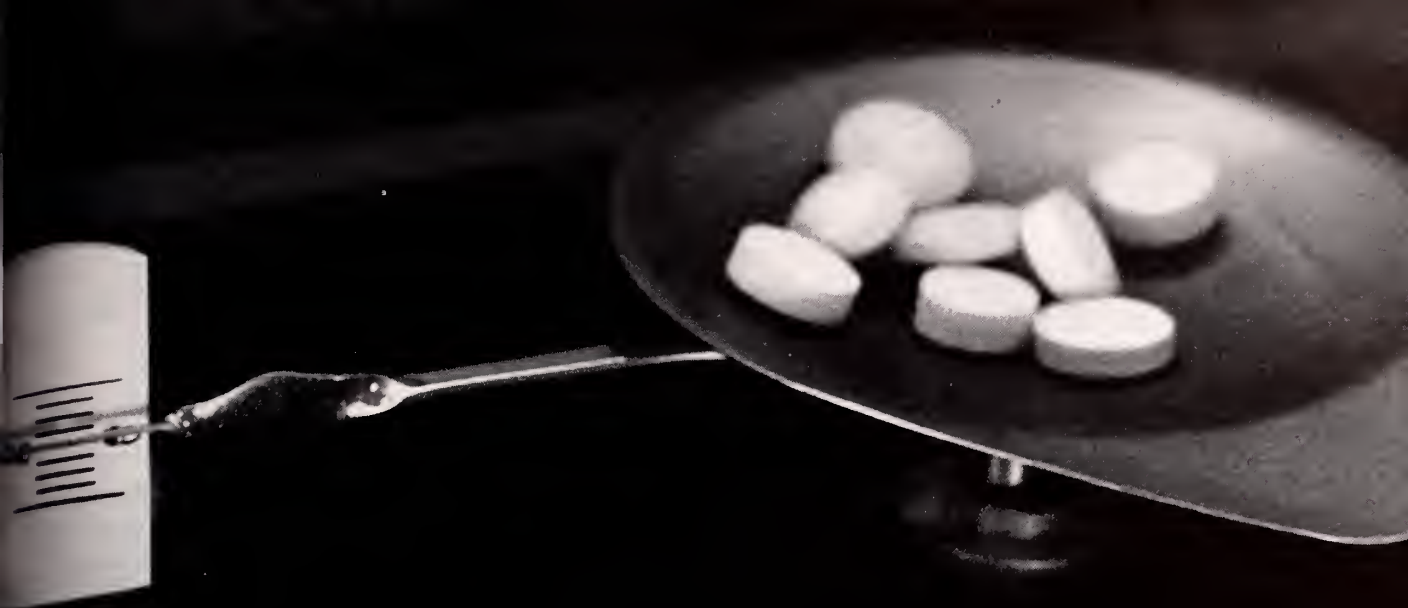
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TRAUMATIC RUPTURE OF THE SPLEEN

ROBT. W. ROBERTSON, M.D., F.A.C.S.

W. BURTON HALEY, M.D., F.A.C.S.

Paducah

SINCE World War II, the syndrome of traumatic rupture of the normal spleen has been reported with increasing frequency. This increased awareness, and the large number of automobile accidents has made the condition one frequently diagnosed by general practitioners and general surgeons. We feel the subject is of sufficient importance to review at this time, especially in view of the high mortality in untreated cases and the dramatic results of properly treated ones. We shall also briefly present for the first time ten cases which the authors have been called upon to treat in the past eight years.

Anatomy

To review briefly, the spleen is a solid abdominal organ usually weighing 100-200 grams in adults, very well protected by its location in the left upper quadrant, nestling as it does beneath the ribs. It is highly vascular, with a pulp consisting of a fine reticulum of fibers forming meshes which contain blood and is covered by a very thin double layered capsule. Because of the great vascularity, the elastic nature of the gland and the lack of confining surrounding structures, rupture causes a severe continuous or interrupted hemorrhage.

The supporting structures are of surgical importance, consisting of the gastrosplenic and lienorenal ligaments which carry the blood supply to the organ. The knowledge of these ligaments is the secret of successful emergency splenectomy.

By far the major cause of increased injury to the spleen is the increase in the number of motor vehicle accidents. In all of our cases except one, automobiles were involved. In only one case was a penetrating wound present. It is, therefore, most important that careful attention be paid to the history, signs and symptoms which will lead us to the correct diagnosis in these closed abdominal injuries. These signs and symptoms may be masked by extensive and multiple injuries and may be variable. An awareness of the frequency of rupture of the

spleen will lead to its careful consideration, and proper treatment will not be too long delayed.

Types of Injury

For convenience in discussion, a classification is given here of the types of injury. First, there is extensive laceration of capsule and pulp which may be near the hilum; second, tear of the capsule; third, subcapsular lacerations. This classification is necessary since the signs and symptoms vary with the type of injury.

With a severe laceration the bleeding will be quite brisk. The patient will complain of abdominal pain, more noticeable in the left upper quadrant, but later generalized. About twenty five percent will have referred pain into the left shoulder. There will be shortness of breath with pain on respiration and hemorrhagic shock with all its usual signs. A patient so injured may completely exsanguinate in a matter of minutes to a few hours at most. With an injury causing less rapid bleeding and allowing the patient to reach a physician, the signs found are a distended abdomen with all evidence of peritoneal irritation. A fluid wave can sometimes be demonstrated. Often involuntary stools and tenesmus of the rectum and bladder may occur from the pooling of blood in the pelvis. Blood studies will show a marked and progressive anemia.

Laceration of the capsule may be caused by a less severe trauma and results in the recurrent, or slow continuous type of hemorrhage. In this, the signs and symptoms are much more slowly progressive with occasionally periods of apparent recovery. The patient usually has the initial left upper quadrant pain, occasionally has left shoulder pain, some pain on respiration, and may have vomiting from gastric dilatation or ileus. There is guarding and rigidity in the upper abdomen, dullness to percussion, and sometimes a palpable mass. A gradually progressive anemia in spite of treatment is one of the cardinal signs.

Subcapsular injury is the most frequent cause

of the delayed hemorrhage and may be caused by minor trauma. Occasionally it is so minor that immediate examination is entirely negative. There may be a lapse of hours, days, or even weeks before signs of hemorrhage occur. On admission this patient is often diagnosed as having a contusion and may even be sent home, but usually in about six to twelve days, he is noted to have sudden and increasing abdominal pain, shock and the usual signs of hemorrhage, as noted before. It is in this type of case that X-Ray examination may be of value and possibly can aid in early surgery, eliminating the hazards of the delayed hemorrhage.

In the recent literature emphasis has been placed upon abdominal paracentesis. We would like to state our feeling on this diagnostic procedure. We have used it on some occasions, but feel strongly that it should be used only as one of the signs in its proper perspective—usually if the other signs and symptoms are sufficient to suggest its use, then it is unnecessary. A negative tap should not deter one from an exploratory laparotomy and a positive tap will only suffice to make you more secure in going ahead with the previously planned procedure.

Diagnosis

Signs

1. Shock, hemorrhagic
2. Tenderness, rigidity and sometimes mass in left upper quadrant.
3. Gastric dilatation and ileus (not present in immediate cases).
4. Progressive anemia
5. Leucocytosis (as with any hemorrhage into the peritoneal cavity).
6. X-Ray examination (findings to look for, but by no means constant, are a mass in left upper quadrant, elevated diaphragm and serrated greater curvature of stomach.
7. Abdominal paracentesis. (Intraabdominal injury if blood is found)

Symptoms

1. History of injury.
2. Abdominal pain early in left upper quadrant, later generalized with rigidity.
3. Respiratory pain.

4. Pain in left shoulder, twenty five percent.
(May be increased by Trendelenburg).
5. Vomiting.
6. Urge to defecate.

Treatment

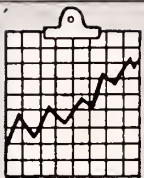
As for treatment for this condition, the answer is obvious. As soon as the suspicion is strong enough, a laparotomy is indicated, and if the diagnosis is confirmed, emergency splenectomy is performed. The technique is not necessary to repeat except to mention that care to prevent injury to the stomach is mandatory. Packing the area, or attempts at repair are not warranted and will only lead to further hemorrhage.

Cases

Case	Age	Sex	Time Lapse	Complications	Results
1. R. D.	42	F	Immediate	Fr. Os calcis rt. Fr. left 4th rib Fr. Patella, compound Fr. femur lower 3rd	Good
2. D. M.	12	M	Immediate	Puncture wound left lumbar area through diaphragm Fr. left humerus	Good
3. F. L.	22	M	Immediate	Laceration liver	Good
4. R. J.	8	M	26 hrs. (slow hemorrhage)	Appeared O.K. on initial examination	Good
5. D. G.	10	M	48 hrs.	Fr. left humerus, contusion kidney	Died
6. E. H.	30	M	16 hrs.	Fr. left 8th rib	Good
7. R. Du.	24	F	18 hrs.	Multiple ribs fr. left side, hemopneumothorax left, fr. right ankle	Good
8. R. T.	25	M	7 days (delayed hemorrhage)	Fr. patella right Fr. humerus left Fr. scapula and clavicle left Atelectasis left lower lobe	Good
9. V. J.	21	M	5 days (continued hemorrhage)	Laceration left kidney, Laceration face	Good
10. L. L. G.	47	M	4 hrs.	Fr. of 7th, 8th & 9th left ribs	Good

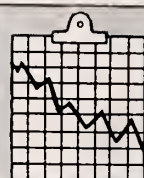
Summary

Since 1948 the authors have been called upon to treat ten cases of rupture of the spleen in Riverside Hospital at Paducah, Kentucky. This is over one-half of such cases recorded there and is a fairly high rate of traumatic rupture of the spleen for private practice. Our cases have run the gamut of types and complicating injuries. These are now reported briefly for the first time to point out some of the variables. Of the ten cases nine survived and one died at the time of surgery.



CASE DISCUSSIONS

From The
University of Louisville Hospitals



CHRONIC ALCOHOLISM—CEREBRAL CORTICAL ATROPHY

Louisville General Hospital

PRESENTATION BY HARRY G. MOORE, JR.,
M.D., SENIOR RESIDENT IN PSYCHIATRY:

L. F., a 62-year-old white, married, male, railroad engineer, was brought to the Louisville General Hospital by his son because of the patient's recent erratic and assaultive behavior. This unusual behavior began some five or six weeks before admission to the hospital. He had been making his usual railroad runs but about this time began to have disagreements with the conductor of his train, ostensibly over the conductor's insistence that the run consume more time to allow greater over-time reward for the crew. The bickering and disagreement culminated in the patient's drawing a knife and chasing the conductor back to his caboose.

This incident occurred one week before admission. Three days later the patient got into an argument with the engineer of another train who, because of insulting remarks, demanded an apology, whereupon the patient drew his knife and started after his opponent, but crew members of both trains interfered before anyone was injured. He did not report to work the following day but spent it drinking with old friends. He dyed his hair in an effort to appear younger. He offered to bargain with the railroad in that he would tell them how to save many thousands of dollars a year provided they would give him half that amount before he would divulge his information. At this time he offered to buy his wife a new home and his son a new automobile.

Impulsive Fight

He became incensed as he thought of the threats the other engineer and his conductor had made and he then resigned, requested his retirement, and went to the railroad yard to accost the other engineer. In the fight that followed the patient injured his right wrist and in

the process of being knocked down sustained several bruises to his thorax and abdomen. He then went to a bar where he proceeded to drink further and when his son arrived the patient was found to be cutting up a country ham and giving it away to casual acquaintances in the bar. He was then brought to General Hospital.

The family history was not helpful. Past history showed him to have been "a happy-go-lucky type of person with no enemies." He had always sought the approval of others and was extremely generous with a fairly large salary. He had worked for the same railroad for 37 years and for an indeterminate but large number of years he had consumed from one-half to three pints of whiskey a day. His son said "he always had it in him." However, he had never missed work because of his drinking.

Over the years engines which he had driven had caused the death of 7 persons, and in the past he had been known to have become quite tearful about these accidents on occasions when he was drinking. In the past year or so this had not occurred. He had seen a physician occasionally over the previous year for precordial pain and dyspnea. At one time he was thought to have had some kidney stones.

Physical Examination Findings

On admission his temperature was 98.6, pulse 96 but mildly irregular, respiration 16, and blood pressure 142/84. Aside from his obvious 62 years of age and his dyed hair the physical examination showed essentially the following: contusion of the right pectoral region and right lower quadrant of abdomen, gross rhinophyma, occasional premature contraction, liver 4 fingers palpable but not tender, bilateral inguinal hernia, and 1 plus pedal edema. The right wrist was somewhat painful and slightly swollen. Beyond revealing evidence of some

liver damage the laboratory findings were all within normal limits.

When first admitted the patient was belligerent, abusive, confused, argumentative, demanding, and generally quite restless. After a few days he became more cooperative but remained somewhat confused and slept quite fitfully. He continued to cry quite easily but gradually lost most of his belligerent attitude and within a week became much more comfortable, although the symptoms of mild disorientation, partial loss of memory—especially for recent events—and emotional lability continued. Although the neurological examination and the cerebro-spinal fluid showed nothing abnormal and the electroencephalogram was described as only mildly dysrhythmic, a pneumoencephalogram showed the presence of cerebral atrophy.

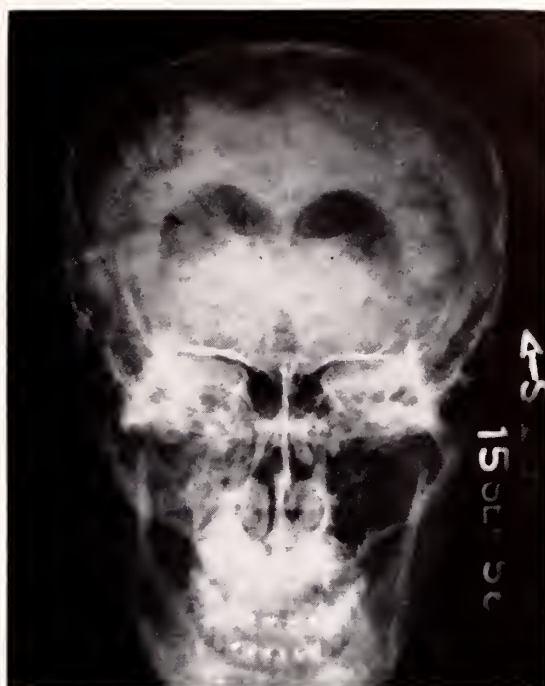
He improved on no specific medication directed toward his belligerency but remained forgetful and showed poor general social judgment on the ward. He was discharged two weeks later and has been functioning extremely well since. We have followed him in the clinic and he expresses no desire for alcohol. He has had his railroad pension activated on a disability basis and actually is said to be quite helpful around the house.

Discussion

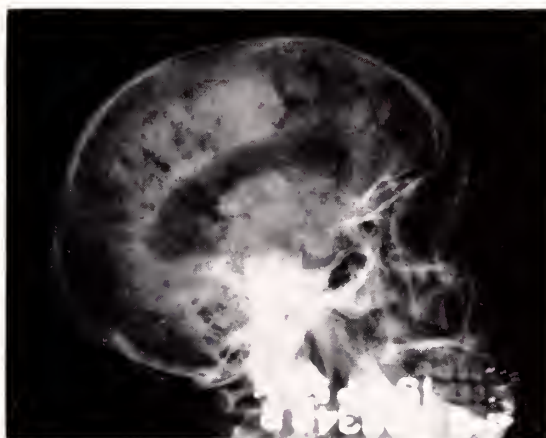
S. SPAFFORD ACKERLY, M.D., CHAIRMAN,
DEPARTMENT OF PSYCHIATRY, UNIVERSITY OF
LOUISVILLE SCHOOL OF MEDICINE:

In the old pre-antibiotic days, this constellation of symptoms coming on either suddenly with some stressful event, or more gradually, usually meant syphilis of the brain—general paresis. This was characterized by an expansive mood, loss of judgment, and slurring of speech. This meant a breakdown in homeostasis, or the balance the individual struck between the slow-growing spread of syphilis and the resistance of the host. This was organic brain disease, but by no means always irreversible because malaria therapy put the majority of persons back on their jobs. The stronger and better knit the pre-morbid personality, the greater the chances of making a recovery.

Likewise, these symptoms could also be caused by other organic brain diseases such as brain atrophy plus age, plus alcohol, plus trying to work at a very demanding job, plus an



Postero-anterior view of pneumoencephalogram showing cortical atrophy.



Lateral view of above pneumoencephalogram.

unsympathetic family. The interplay of these factors broke down the balance which this particular patient had been maintaining for years without symptoms and which he regained again under treatment when his job stress and drinking were removed and his family paid him the respect due a sick man.

EDWARD E. LANDIS, M.D.—With the history of a long-term alcoholic intake one would, of course, think of this as the etiology and yet it must be remembered that similar pictures are found in patients who never did use alcohol in any form. We are able to see a degree of cortical atrophy in a fair number of patients, who show

no peripheral evidence of any neurological involvement at all and it seems that more of this type of atrophy is being discovered in direct relationship to the number of air studies that are done.

JOSEPH GOLDSTEIN, M.D.—It seems to me that a very important facet of this case has to do with the family. Both the wife and son had begun to feel that the patient was simply acting as a bad character, drinking to excess and becoming generally socially unacceptable. When it was explained to them that the father was really sick and that something had happened to his brain with the result that he was not entirely responsible for his actions, their whole attitude changed and they could be very accepting of his judgmental defects, they could be tolerant of his memory loss, and they are even able to see the positive aspects of what remains.

One wonders, too, why the appearance of the marked behavior symptoms at the particular time? Was he under increasing stress in keeping up with his job, in view of, for one thing, the memory and other intellectual impairment associated with the cortical atrophy? In management, one must consider the entire person; for example, present or recent sources of stress and previous personality, as well as the atrophy.

E. ROSEMAN, M.D.—Certainly there can be no doubt that this patient did have evidence of cortical atrophy as manifested by his somewhat enlarged ventricular system and the moderate amount of air in the subarachnoid spaces. I would have to agree that, in general, we do not know the cause of this type of cortical atrophy. In my experience, at least, certainly there is no quantitative correlation between the amount of cortical atrophy (presumably brain damage) and the mental or physical status of an individual. I think from a positive standpoint we can say that in severe or extreme cases of cortical atrophy invariably there is a dulling of the intellectual capacity of the individual. Conversely, I believe that we can say that we have seen mentally defective individuals without evidence of cortical atrophy. How we stand on the inbetween grades of cortical atrophy such as this man has, I do not know what to say.

Furthermore, I think we can say that the evidence as given by air studies is not too conclu-

sive since it is not at all unusual to see a moderate amount of ventricular dilatation and/or increased subarachnoid spaces by X-ray but shortly afterwards at autopsy these may not be evident. Also we have seen children who had obstructive hydrocephalus with very large ventricles; subsequently, the obstruction is relieved and the ventricles can return to normal or almost normal.

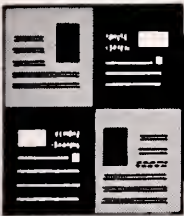
I feel that it would be important to try and work out as quantitatively as one can, with all the parameters that we have available to us, the relationship between so-called cortical atrophy as manifested by air studies and intellectual functioning of an individual.

One last thought comes to my mind, namely that it is certainly possible that in chronic alcoholism one can get, as Greenfield (the English neuropathologist) states, a central neuritis or neuronitis. This certainly would knock out the cortical cells, particularly in the frontal lobes, with resultant cortical atrophy. The same picture, of course, could be due to chronic nutritional deficiency, with particular reference to the effects on Vitamin B-1 metabolism.


DR. ACKERLY: The brain of man is a wonderful instrument. It can take an awful lot of damage in its stride, especially if the injury or disease comes on slowly. One can trade on this compensatory mechanism, however, just so much and then like a decompensated heart, symptoms appear.

It is important to keep in mind organic brain disease the same as one does organic heart disease, but not to be any more afraid of it than one is of heart disease. The same treatment of all the factors concerned is indicated. Most physicians early in their practice, including myself, were wrong more often than right in making a diagnosis of organic brain disease. Furthermore, in my experience there is a tendency for all physicians, by and large, to make the prognosis of organic brain disease more grave than is necessary. Whenever mental symptoms are markedly atypical, however, I want an electroencephalogram and, if that doesn't show anything, I do not hesitate to order an air encephalogram.

Concerning the etiology of cortical atrophy, I wish I knew. The family tree here is probably more important than any other factor.



SPECIAL ARTICLES



THE PRACTICING PHYSICIAN AND THE PUBLIC HEALTH DEPARTMENT*

A. O. MILLER, M.D.
Scottsville

IN the early history of the United States practically all public health work was done by practicing physicians as part of their civic duty. Occasionally, when an epidemic occurred, a temporary commission of physicians was appointed by government—state or local—to deal with the immediate situation. When the outbreak ceased, the commission was discharged. This plan was in vogue as late as 1870 in New York, when Stephen Smith was selected as a member of a commission to investigate local health conditions and suggest methods for betterment. The medical profession, individually and as an organized body, was a potent factor, in fact often the only instrumental agency in the community for protection of the public health.

As a community's responsibility in these matters grew more and more apparent, it became the general custom of local government to employ resident physicians on a part-time basis to carry out certain community health functions, such as isolation and quarantine, fumigation, sanitary inspection, medical examination of school children, etc. In fact, the whole structure of the New York State Health Department, as developed by Doctor Biggs, was founded on the principles of utilization of expense. A part-time physician was the official public health representative in each of the respective communities.

The concept of full-time public health executives, especially trained for their work and with suitable tenure of office, is a relatively recent one. Only a few far-sighted leaders during the

past century understood that the nation needed young men and women who would undertake public health as a special profession and make it a life career. Lemuel Shattuck recognized public health as a separate field of medicine in 1850. Charles W. Elliott, the famous president of Harvard University, understood it clearly and was instrumental in founding the first training for public personnel. And the first State Board of Health was organized in Massachusetts in 1869.

Field Offers Many Opportunities

Everyone familiar with the field of public health is now quite cognizant of the fact that public health administration, epidemiology, vital statistics, public health laboratory work, child hygiene activities, sanitary engineering, public health nursing, health education, industrial hygiene and the like are all special techniques that require special training and experience. Young physicians, nurses, engineers and other personnel that are interested in, and have special aptitude for, this type of work now prepare themselves for a life career in their chosen field. They have every assurance that if they possess real ability and prepare themselves properly they will have the opportunity to obtain interesting and satisfactory employment.

In the past, a good deal of friction and misunderstanding has arisen between the official health agencies and the practicing physicians. This is entirely unnecessary, but understandable. It has been due in great part to a lack of consideration on the part of the health officer or members of his department for the viewpoint of the physician, and a lack of understanding

*Read before the 1957 meeting of the Kentucky Public Health Association in Louisville.

by the physician of the purposes and objectives of the health department. One principle must be kept in mind. The fundamental purpose of both the physician and the health department is the same. They are striving for the better health, and thus greater happiness, of the community. The goal is the same, though it is reached by different paths. These paths cross each other frequently.

The daily work of the physician covers a scope of activities which are related directly or indirectly to almost every part of the health department program. The health department makes many requests of the physician. These requests are not unreasonable. They represent obligations which the physician assumes when he enters medical practice and which should be performed as a public duty. The health department makes a fair exchange. It has much to offer the physician, so that the final arrangement is one of mutual assistance and mutual advantage.

Functions of the Private Physician

The physician has two distinct functions in the community in relation to health protection and promotion. First, because of the very nature of his profession, he has certain direct obligations to the community. When the State grants him a license to practice medicine, he virtually agrees that he will carry out all his duties and responsibilities in relation to the promotion of the official health services of the community. The second obligation to the community and to his patients is even more important than the first; namely, the obligation to incorporate the principles of preventive medicine as an essential part of his everyday clinical practice. Let us consider first the public-health functions of the practicing physician.

Vital Statistics

It is the duty of each physician to report promptly to the health department all births and deaths that occur in his private practice. This simple procedure is one of the primary obligations to his patients and to the community that a physician assumes when he is granted permission by the State to practice medicine. The health department should be as accurate as possible, for these records mean so much to the public now—more so than ever before on account of work, pensions and other records.

Communicable Disease Control

One of the chief means of control of communicable disease is the early recognition and immediate isolation of the patient by the physician. An epidemic of smallpox, scarlet fever, typhoid or even sore throat may be a simple clinical case to the individual practicing physician, but may represent to the health officer a unit of widespread epidemic. The health department has no satisfactory method of discovering cases of suspected communicable disease, except through physicians.

Aside from the foregoing, the earliest public-health practice which has survived to the present day is maritime quarantine, which was developed by the Medieval Italian cities of Venice and Genoa, at the height of their commercial splendor, as a protection against the introduction of plague from oriental ports. Ideas of disease transmission were vague, but transmissibility of some was suspected.

Kircher advanced the hypothesis that various infections were the result of the activity of minute organisms which had invaded the body.

In 1843, Oliver Wendell Holmes first called attention to the contagiousness of puerperal fever.

Activity of water as route for transfer of infective agents was noted in 1854 by Doctor Snow in connection with the Broad Street Well cholera outbreak.

In 1857, Doctor Taylor recognized similar activity of milk in an outbreak of typhoid at Penrith.

The importance of carriers in the perpetuation of typhoid fever was first recognized by Robert Koch in 1902.

First great demonstration of preventive medicine and public health principles was by Gorgas, when he eradicated yellow fever and malaria from Havana and the Canal Zone. This accomplishment may be considered to mark the beginning of active public interest in the possibilities of preventive medicine and public health.

History Of Immunizations

First attempt at artificial immunization among European nations is credited to Lady Wortley Montague, who from 1717-1721 introduced into England from Constantinople the process of variolation as a protection against smallpox by Material of postule from patients with smallpox.

The work of Montague was overshadowed by the employment of an attenuated virus from vaccination against smallpox. This was done by Jenner and first published in 1798.

No further progress was made until 1881 when Pasteur demonstrated the protective power of his anthrax vaccine on sheep. This same principle was extended in 1885 to the treatment of rabies.

A great deal of misunderstanding and difficulty has arisen between the health department and the physician in regard to immunization programs, particularly those for the prevention of typhoid fever, smallpox, diphtheria and polio. Many physicians feel that the health department should do no clinical work at all, but rather should refer all persons to the private physician for immunizations procedures.

Whenever physicians incorporate standard preventive measures in their private practice, the health department can relinquish immunization programs.

The logic of the health department is clear-cut. A given disease is prevalent in the community, or at least is a potential menace. An effective method of prevention is at hand, namely, mass immunization of the community. Through well-recognized channels of mass education and appeal the community can be advised of the facts.

Since the health department is supported by taxation, it cannot discriminate between those who can afford to pay for this service and those who cannot. The health department should urge individuals to go to their own private physicians and should furnish biological products for immunization to the doctors, either free or at cost. Physicians should be willing for any child who is brought to the health department for immunization against smallpox, diphtheria, typhoid or polio to be given this free. Experience has shown repeatedly that mass immunization procedures do not rob the physician of his legitimate practice, but rather increases his office visits for the specific procedure five to ten-fold.

It must be generally conceded as a fundamental principle that the health department should do as little clinical work as possible, compatible with the protection of the general health of the community. Whenever mass immunization will prevent outbreaks of disease, however, the health department is under obligation to carry out immunization at public cost

by the most effective and least expensive means. Mass immunization is done to protect the community. Incidentally, individuals may be safeguarded, but the primary purpose is community protection.

Tuberculosis and Venereal Disease Clinics

Tuberculosis and the venereal diseases may be placed in the same category for the purpose of discussion because both require long, continued and expensive treatment. A cooperative relationship between health department and physicians may be developed in dealing with these cases. This program should be of mutual advantage to the health department and physician. Prompt reporting of all cases by physicians is essential to success.

Laboratory Service

One of the major functions of the health department is to offer physicians free laboratory facilities for the diagnosis of communicable disease. The active extension of this work as part of the public health service has been greatly appreciated by the physicians and has been one bond which has drawn the medical profession and health department closer together.

Child, Adult and School Hygiene

The need for child hygiene and clinic service, including prenatal clinics, preschool clinics, etc., was so obvious and urgent that these clinics have been successful from the beginning. If any defect or illness is discovered, the child or adult is referred to his private physician for advice. This system has met the real need and is an educational rather than a remedial or therapeutic activity.

The Health Officer

The health officer should make every effort to win the confidence, friendship and approval of the organized medical body of the community. Misunderstanding will arise between the health officer and the practicing physician concerning health department policies. Mistakes will be made. Feelings will be injured. These conditions are not rectified by hostilities and lack of sympathy. It is necessary that the physician become familiar with the more useful methods and technics that may be utilized in the prevention of disease and the promotion of health.

(Continued on Page 648)



EDITORIALS



U. S. ENTERTAINS THE INTERNISTS IN 1958

THE International Society of Internal Medicine has announced that its Fifth International Congress of Internal Medicine will be held at the new Sheraton Hotel, Philadelphia, Pennsylvania, April 24-26, 1958. This will be the first meeting of the Society outside of Europe. In making the announcement, the International Society's President, Sir Russell Brain, who is also president of the Royal College of Physicians of London, said, "The Executive Committee of the Society has chosen the United States for its Fifth Congress in response to an invitation extended by the American College of Physicians and with the objective of securing greater American participation in its deliberations and of allowing foreign members, at first hand, to learn about American developments in the medical sciences."

The previous Congresses, at two-year intervals, were held in Paris, London, Stockholm and Madrid. At those meetings, however, the United States, as well as many other nations throughout the world, was represented. The present membership of the Society, including forty-eight nations, is about 3,000.

This Society, the only international one embracing all aspects of internal medicine, was organized in 1948 and largely at the instigation of Professor Nanna Svartz of Stockholm, the physician to the King of Sweden. It was her contention that the various branches of internal medicine should keep in touch with one another, as is accomplished in North America by the American College of Physicians, and that this should be done on a truly international basis. She also emphasized the importance of purely personal and non-political contacts among physicians of different countries.

The objectives of the Society, as stated in its Statutes, are "to promote scientific knowledge in internal medicine, to further the education of the younger generation and to encourage

friendship among physicians of all countries." The members are "specialists in internal diseases, acknowledged as such and accepted by the appropriate national societies of internal medicine."

The first president of the International Society was Professor A. Gigon, of Basel, Switzerland. He was succeeded, in 1952, by Dr. Svartz and she, by Sir Russell Brain, the president of the Royal College of Physicians of London.

At the Philadelphia Congress it is planned, through lectures and panels, to analyze medical achievements of world-wide significance, to evaluate certain apparent problems and to chart courses of action, designed to enhance technical knowledge and to aid in the continuing war against disease. At the same time, the plan includes such social and cultural activities as will tend to promote cooperation, friendship and mutual understanding among physicians and peace among their countries.

The 1958 Annual Session of the American College of Physicians will occur in Atlantic City, April 28 to May 2, immediately following the Philadelphia Congress. The members of the Congress are invited to attend all the scientific programs and extensive exhibits (the foreign members on a purely courtesy basis). Also, those members of the Society who make an early reservation and advance payment may join certain Fellows of the College on its customary post-convention cruise to a near-by foreign country. Tours throughout the United States may be arranged through an approved travel agency. T. Grier Miller, M.D., Philadelphia, is the president of the Congress; Edward R. Loveland, F.A.C.P. (Hon.), is the secretary-general; and Mr. J. Malcolm Johnston, Philadelphia, the treasurer. Plan now to attend. It is the finest opportunity Internists have had.

Sam A. Overstreet, M.D.



ORGANIZATION SECTION



Three Specialty Groups Name Annual Meeting Speakers

Three more specialty groups have announced their speakers for the 1957 KSMA Annual Meeting to be held September 17, 18 and 19 at the Columbia Auditorium in Louisville.

The groups and their speakers are: Kentucky Academy of General Practice, Alton Ochsner, M.D., New Orleans; Kentucky Psychiatric Society, Lawrence C. Kolb, M.D., New York; Kentucky Obstetrical and Gynecology Society, Ralph A. Reis, M.D., Chicago.

Professor of surgery at the School of Medicine, Tulane University, Doctor Ochsner is also president of the Alton Ochsner Medical Foundation and director of surgery at the Ochsner Clinic and Ochsner Foundation Hospital in New Orleans. He will speak on "Carcinoma of the Stomach" at the general session of the KSMA Annual Meeting at 10:30 a.m. Thursday, September 19. At his group session at 4 p.m. Wednesday he will discuss "Differential Lesions of the



Dr. Ochsner

Chest and Their Diagnosis."

"Pain As An Emotional Problem" is announced as the subject of a paper to be presented by Doctor Kolb before the general session at 11:30 a.m. Tuesday, September 17. He will speak again before his specialty group at 3:30 p.m. Wednesday on "Psychotherapeutic Evolution and Its Implications." Doctor Kolb is professor of psychiatry at the College of Physicians and Surgeons, Columbia University, and director of the New York State Psychiatric Institute.

Also a speaker at the Tuesday morning general session, Doctor Reis will be presented at 10:50 a.m. for a talk on "Obstetrical Anesthesia and Analgesia. His topic for his group session at 1:45 p.m. Wednesday, September 18, will be "A Re-evaluation



Dr. Kolb

of Endocrine Therapy."

Doctor Reis is professor of obstetrics and gynecology at Northwestern University and senior attending obstetrician and gynecologist at Michael Reese Hospital, Chicago. Editor of Obstetrics and Gynecology, he is the author of some 80 articles and co-author of a monograph on "Diabetes and Pregnancy."



Dr. Reis

Rural Medical Scholarship Fund Approves 20 Loans

Twenty medical students were approved for loans by the Board of Trustees of the Rural Kentucky Medical Scholarship Fund at its May 23 meeting. This is a new high for the KSMA-sponsored program and brings to 121 the number of students the Fund has helped or is helping to get a medical education.

To meet the increase in tuition announced by the University of Louisville School of Medicine, the Board of Trustees voted to increase the annual loan from \$800 to \$900, adding more than \$4,000 to the volume loaned each year.

Each loan is renewable in future years if the recipient remains qualified. In return for the financial aid, a student promises to practice in rural Kentucky—at least 20 miles from a city of 50,000 or more and 10 miles from a city of 5,000 to 50,000.

For practicing in any of 10 "critical" counties—where doctors are most needed—the recipient is credited with repayment of his loan for each year he spends in that location. Ordinarily, the students must practice a year in a rural area for each year of their loans, with repayment to begin three years after graduation.

Jackson County was added to—and Rockcastle County removed from—the 10-most-doctor-short counties this year. The other nine more needy counties are Powell, Martin, Knott, Magoffin, Elliott, Knox, Cumberland, Leslie and Breathitt.

Richard R. Slucher, M.D., Buechel, KSMA president, and Paul Griggs, Louisville, public relations director of the Kentucky Chamber of Commerce and formerly of the Kentucky Farm Bureau Federation, were elected as members of the Board of Trustees.

Bobbie R. Grogan Is Named KSMA Field Secretary

Bobbie R. Grogan, Murray, has been appointed field secretary of the Kentucky State Medical Association, effective June 1, according to announcement by Richard R. Slucher, M.D., Buechel, the association's president.

Mr. Grogan succeeds John Guy Miller, who held the position for five years and is now with the American Medical Association's Council on Medical Service in Chicago.



Mr. Grogan

A native of Calloway County, Mr. Grogan received his Bachelor of Science degree in agriculture from Western Kentucky State College, Bowling Green, in 1938 and his Master of Science degree in agricultural education from the University of Kentucky in 1950.

He has taught vocational agriculture at Lynn Grove High School in Calloway County, Elkton High School in Todd County and Murray State College Training School. Since 1950 he has been area supervisor for the State Department of Vocational Education.

Included in Mr. Grogan's duties will be serving as field secretary for the Rural Kentucky Medical Scholarship Fund and the KSMA Physician Placement Service, and as field director for the Kentucky Rural Health Council.

Mr. Grogan served 43 months in the Army Air Force in World War II. He is married and has two children, Gary Swann, 10, and Jennifer, 6.

KSMA Sends Large Delegation To AMA Annual Meeting

The annual meeting of the American Medical Association, held June 3-7 in New York, attracted more than 80 physicians from Kentucky.

Physician registration at the sessions went over the 19,000 mark, setting an all-time record for an AMA meeting, according to registration officials. The previous high was in 1953 when the total registration for the five-day meeting in New York was 17,958.

Kentucky physicians attending the 1957 meeting, as listed by the AMA Daily Bulletins, follow:

Tuesday

Lytle Atherton, John T. Bate, H. W. Bradshaw, William W. Spalding, Oren A. Beatty, Lawrence A. Davis, Robert W. Dockery, R. Arnold Griswold, J. C. Hill, Nathan Levene, Homer B. Martin, Joseph C. Ray, Karl T. Winter, all of Louisville.

John B. Floyd, Jr., Richard A. Hamilton, Maurice Kaufmann, Howard W. Kopping, Lloyd O. Larsen, all of Lexington.

W. H. Bryant, Glasgow; W. H. Diessner, Middlesboro; Harry J. Grossman, Fort Campbell; K. L. Lockwood, Outwood; Merle Mahr, Madisonville; Robert J. Salisbury, Mt. Sterling; I. Zapolsky and Jesse W. Smith, Paris; Boyd Caudill, Lawrenceburg; Guthrie Y. Graves, Bowling Green; Wilbur R. Houston, Erlanger; S. E. Reynolds, Morehead.

Anne H. Hopwood, C. E. Hornaday, Harold J. Schubach and Frank L. Yarbrough, all of Owensboro.

Wednesday

W. H. Armbruster, W. Reeve Hansen, Robert W. Lykins, Dorothy Ma, A. Clayton McCarty, Carlisle Morse, Ben A. Reid, Gracie R. Rowntree, Marjorie Rowntree, L. H. South, E. Alden Terry, all of Louisville.

Clark Bailey and John H. Willard, Harlan; L. L. Cull, Frankfort; David D. Drye, Bradfordsville; Charles E. Hornaday, Owensboro; Allyn F. Judd, Whitesburg; Capt. Arthur Klatsky, Fort Campbell; James O. Mattax, Carrollton; Paul Muney and W. Vinson Pierce, Covington; Charles F. Schneider, Hazard; Charles Weber, Fort Knox.

W. K. Massie, Ralph L. Odley, Joseph Schickel, Jane B. Sears, Kenneth L. Sears, William R. Thompson, all of Lexington.

Thursday

Warren H. Ash, Asa Barnes, Andrew J. Bowen, Samuel J. Brownstein, Layman A. Gray, all of Louisville.

Louis Alex Gentile, Fort Knox; M. M. Lawrence, Jamestown; Galen Fisher Scudder, Pine Mountain; Patricia M. Smith, McDowell; A. D. Butterworth, Murray; Joseph S. Krakauer, Middlesboro; Earl P. Oliver, Scottsville; William O. Preston, Lexington; Lester Wortsman, Cumberland.

Friday

Dwight L. Blackburn, Berea; Jesse T. Funk, Bowling Green; Allon E. Grimes, Lexington; Malcolm Thompson and Fred M. Williams, Louisville.

AMA House of Delegates Approves New Set of Principles

The New Principles of Medical Ethics, the writing of which has occupied the attention of medical leaders at all levels in recent months, were approved at the annual meeting of the American Medical Association's House of Delegates in New York, June 3-6.

Following authorization of the Seattle meeting of the AMA's House of Delegates in 1956, the AMA's Committee on Constitution and By-Laws presented a document which was amended slightly by the Reference Committee and eventually passed.

The new set of Principles will be found on the op-



An advisory committee of physicians and health officers to consider precautionary steps in the United States against the current influenza epidemic in the Far East has been established by Leroy E. Burney, M.D., Surgeon General of the Public Health Service in Washington.

The New Principles of Medical Ethics

Preamble

THESE principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

Section 1. The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

Section 2. Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

Section 3. A physician should practice a method of healing founded on a scientific basis; and he should not voluntarily associate professionally with anyone who violates this principle.

Section 4. The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

Section 5. A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him, and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

Section 6. A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

Section 7. In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.

Section 8. A physician should seek consultation upon request; in doubtful or difficult cases, or whenever it appears that the quality of medical service may be enhanced thereby.

Section 9. A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

Section 10. The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community.

196-Member House of Delegates Register 100 Per Cent

W. Clark Bailey, M.D., Harlan, and W. Vinson Pierce, M.D., Covington, represented the Kentucky State Medical Association at the annual meeting of the American Medical Association's House of Delegates at the Waldorf-Astoria in New York, June 3-6.

There was 100 per cent registration of the 196-member House of Delegates.

Doctor Pierce was appointed to serve on the Reference Committee on Medical Military Affairs. Doctor



The above shows KSMA's two delegates, W. Clark Bailey, M.D., Harlan, left, and W. Vinson Pierce, M.D., Covington, at work in the AMA House of Delegates the morning of June 4 at the Waldorf in New York.

Bailey attended several meetings of the Committee on Medical Care for Industrial Workers, of which he is a member.

While a number of important actions of the House of Delegates are reported elsewhere in this issue of the Journal, among the matters not covered are: the House voted to condemn any payments under the Medicare Program, "to or on behalf of any resident, fellow, intern or other house officer in similar status who is participating in a training program." The House also voted to recommend that the decision on the type of contract and fee schedule in the future should be negotiated between the Defense Department and individual states.

The states of New York and Connecticut offered resolutions favoring compulsory inclusion of physicians in the Federal Social Security system. The House of Delegates reaffirmed their opposition to compulsory coverage of physicians under the Social Security Act. They also reaffirmed their support of the Jenkins-Keogh Bills.

In the field of Occupational Health, the House approved a new statement authored by the Council on Industrial Health and submitted through the AMA Board of Trustees, "Scope, Objectives and Functions of Occupational Health Programs." The Reference

Committee report commended the statement as approved.

A new statement entitled "Functions and Structures of a Modern Medical School" was approved by the House of Delegates. It was presented by the American Medical Association Council on Medical Education and Hospitals following a year's careful study.

Symposium On Chest Diseases Set For July 18 In Louisville

A postgraduate symposium on diseases of the chest will be presented by District Two State Tuberculosis Hospital in Louisville, Thursday, July 18, at 6 p.m. Central Daylight Saving Time. Dinner will be served at the hospital, according to an announcement by Oren Beatty, M.D., director for the hospital.

The program is sponsored by the State Tuberculosis Commission, the Kentucky State Medical Association and the Kentucky Academy of General Practice.

Subjects for the scientific program have been announced as follows: "Tuberculosis In Children," Billy M. Adams, M.D.; "Successes and Failure In Treatment of Tuberculosis," N. Levene, M.D.; "Practical Factors In the Office Diagnosis of Histoplasmosis," Homer Martin, M.D.; "Laboratory Aids for the Detection of Lung Disease," Stephen F. Chapman, M.D.

National Coroners to Convene In Louisville Aug. 21

Richard R. Slucher, M.D., Buechel, president of the Kentucky State Medical Association, will welcome the National Coroners Association to Louisville for its annual convention seminar, August 21-24 at the Seelbach Hotel. The group represents the 25,000 coroners of the United States and Canada.

W. W. Shepherd, M.D., Campbellsville, the association's president-elect, will be installed as president at the meeting. He will also act as official host for the Coroners Association of Kentucky.

Speakers on the program include outstanding criminologists, toxicologists and medico-legal men of the country. Also, several experts are scheduled to discuss the subject of auto traffic fatalities.

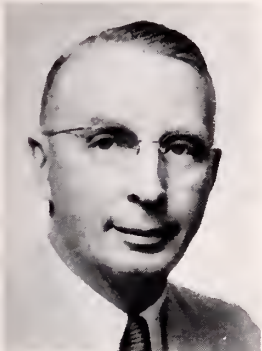
300 Attend Ackerly Dinner

A testimonial dinner marking his 25th anniversary in Louisville was held June 19 at the Pendennis Club in honor of Spafford Ackerly, M.D., "dean" of psychiatry at the University of Louisville School of Medicine and medical director of the Child Guidance Clinic. He was presented with a silver tureen and wine coolers donated by the 300 persons at the dinner.

Tributes to Doctor Ackerly's work in behalf of mental health in Kentucky were paid by William Keller, M.D., director of psychiatric services at General Hospital; Harold L. McPheeters, M.D., commissioner of the Kentucky Department of Mental Health; E. E. Landis, M.D., medical director of the psychiatric clinic at Norton Memorial Infirmary, and Barry Bingham, editor-in-chief of The Courier-Journal and Louisville Times.

Wisconsin Surgeon Is New AMA President-Elect

Gunnar Gundersen, M.D., 60-year-old surgeon from LaCrosse, Wis., is the new president-elect of the American Medical Association, having been elected to that office by the 196 members of the AMA House of Delegates at its annual meeting in New York in June.



Dr. Gundersen

Doctor Gundersen will become AMA's 112th president when he is inducted at the association's 1958 annual meeting in San Francisco next June. He will succeed David B. Allman, M.D., Atlantic City, N. J., who took over the presidency at the New York session.

Born in LaCrosse on April 6, 1897, Doctor Gundersen began the practice of medicine in 1922 as an associate of his father. He now operates the Gundersen Clinic in LaCrosse, along with three of his physician brothers, Sigurd B., Alf H. and Thorolf E. Gundersen. Two other physician brothers, Trygve Gundersen and Sven M. Gundersen, are practicing in Boston and Hanover, N. H., respectively.

Doctor Gundersen did his prep school work in Oslo, Norway, and returned to the U. S. to obtain his B. S. degree at the University of Wisconsin in 1917 and his M. D. at Columbia University in 1920. He served his internship and residency at LaCrosse Lutheran Hospital from 1920 to 1922.

Dr. Graves Completes Term of Office

Guthrie Y. Graves, M.D., Bowling Green, completed his tenure of office as president of the Conference of Presidents and Officers of State Medical Associations at the group's annual meeting in New York June 2.

John W. Green, M.D., Vallejo, Calif., was inducted as president of the organization. E. L. Bernhart, M.D., Milwaukee, Wis., was named president-elect.

AMEF Gets \$170,450 from Illinois

The American Medical Education Foundation was presented \$170,450 in cash by the Illinois State Medical Association at the American Medical Association's annual meeting in New York in June. Accompanied by armed guard, the society's president and secretary-treasurer appeared before the AMA's House of Delegates and turned over the bags of money to Louis H. Bauer, M.D., New York, AMEF president.

Other contributions by Illinois doctors will bring the year's total to more than \$200,000, announced Harold M. Camp, M.D., Monmouth, Ill., secretary-treasurer of the Illinois society. Illinois already has contributed more than \$1 million to the fund to place it at the top of the list of state medical society donors.

AMA House of Delegates Passes UMWA 'General Guides'

Free choice of physicians, fee-for-service and relationships with the United Mine Workers of America were the subjects of long and serious consideration before action was taken on the third party issue by the American Medical Association's House of Delegates at its 1957 annual meeting in New York.

"Suggested Guides to Relationship Between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund," which was submitted for consideration by the AMA's Committee on Medical Care for Industrial Workers and amended by the Reference Committee, was finally passed by the House.

The committee recommendation was considered at the same time resolutions from five states on the third party issue were studied by the House of Delegates. Clark Bailey, M.D., Harlan, is a member of the AMA's Committee on Medical Care for Industrial Workers.

In approving the statement of "General Guides," the House of Delegates recommended that the Board of Trustees study the feasibility of setting up similar guides for relations with other third-party groups such as Labor Management Health and Welfare Plans.

The statement, which outlines both medical society and UMWA responsibilities, contains these "General Guides":

1. All persons, including the beneficiaries, of a third-party medical program such as the UMWA Fund, should have available to them good medical care and should be free to select their own physicians from among those willing and able to render such service.

2. Free choice of physician and hospital by the patient should be preserved:

- a. Every physician duly licensed by the state to practice medicine and surgery should be assumed at the outset to be competent in the field in which he claims to be, unless considered otherwise by his peers.

- b. A physician should accept only such terms or conditions for dispensing his services as will insure his free and complete exercise of independent medical judgment and skill, insure the quality of medical care, and avoid the exploitation of his services for financial profit.

- c. The medical profession does not concede to a third party such as the UMWA Welfare and Retirement Fund in a medical care program the prerogative of passing judgment on the treatment rendered by physicians, including the necessity of hospitalization, length of stay, and the like.

3. A fee-for-service method of payment for physicians should be maintained except under unusual circumstances. These unusual circumstances shall be determined to exist only after a conference of the liaison committee and representatives of the Fund.

4. The qualifications of physicians to be on the hospital staff and membership on the hospital staffs is to be determined solely by local hospital staffs and by local governing boards of hospitals.



At the annual dinner meeting of the Seventh Councilor District, Branham Baughman, M.D., Frankfort, left, councilor for the district, poses with Willett H. Rush, M.D., Frankfort, acting president of the Franklin County Medical Society; Clarence T. Coleman, M.D., Frankfort, KSMA Outstanding General Practitioner Award winner; Richard R. Slucher, M.D., Buechel, KSMA president; Reuben Lawson, M.D., Lawrenceburg, retiring district president; Woodford B. Troutman, M.D., Louisville, KSMA secretary and treasurer; Boyd Caudill, M.D., Lawrenceburg.

Bedford Physician Elected 7th District Head

Carl Cooper, Jr., M.D., Bedford, Ky., was elected president of the Seventh Councilor District at its annual meeting, attended by 60 physicians and their wives, in Frankfort on Wednesday, May 29, according to an announcement by the councilor of the district, Branham Baughman, M.D., Frankfort.

At the afternoon session, scientific papers were presented by Shelby Hicks, M.D., New Castle; George Perrine, M.D., Pewee Valley, and Malcolm L. Barnes, M.D., Louisville. Following the dinner the audience was addressed by KSMA President Richard R. Slucher, M.D., Buechel, and William R. Willard, M.D., dean of the University of Kentucky School of Medicine.

Doctor Cooper succeeds Reuben N. Lawson, M.D., Lawrenceburg, as president. O. A. Cull, M.D., Owenton, was elected vice-president and Robert L. Houston, Jr., M.D., Eminence, was elected secretary and treasurer. The Franklin County Medical Society was host to the meeting.

KSMA Aiding TB Hospitals In Postgraduate Symposia

The Kentucky State Medical Association is now cooperating with the State Tuberculosis Hospital Commission in developing Postgraduate Symposia on Diseases of the Chest, which are held twice each year at each of the six State Tuberculosis Hospitals.

The announcement was made by Garrett Sweeney, M.D., Liberty, chairman of the KSMA Committee on Postgraduate Medical Education. Doctor Sweeney said the additional activity is a part of his committee's work and was undertaken following authorization by the Executive Committee of the Council.

The following physicians have been appointed by Doctor Sweeney's committee to work with the local Tuberculosis Hospitals in setting up the programs:

Darryl P. Harvey, Glasgow; Wendell V. Lyon, Ashland; George W. Pedigo, Louisville; Robert E. Pennington, London; Loman C. Trover, Madisonville, and Richard J. Wever, Paris.

45 Physicians, Wives Attend Fourth District Meeting

Approximately 45 physicians and their wives attended the annual dinner meeting of the Fourth Councilor District, Thursday, May 23, at the Lebanon Country Club in Lexington.

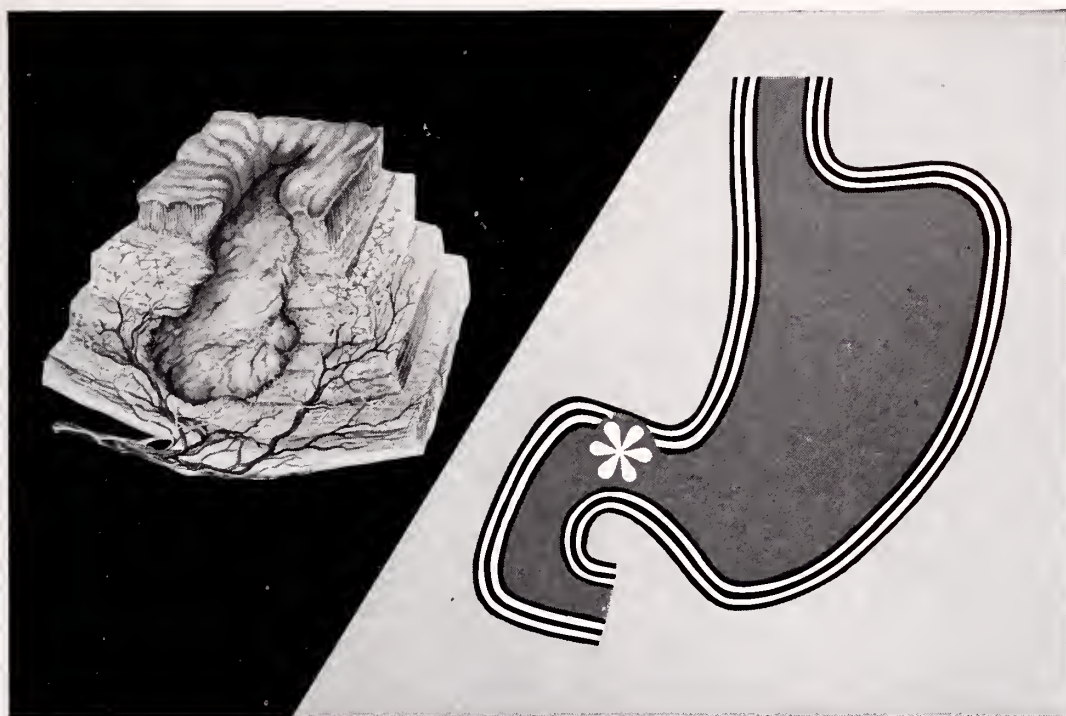
D. D. Drye, M.D., Bradfordsville, president of the Marion County Medical Society, presided at the meet-



Enjoying country ham at the Fourth Councilor District meeting at Lebanon May 23 are, from left, Thomas M. Marshall, M.D., Louisville, one of the essayists; D. D. Drye, M.D., Bradfordsville, president of the Marion County Medical Society, host for the meeting; Richard R. Slucher, M.D., Buechel, KSMA president; John S. Harter, M.D., Louisville, scientific essayist. Seated with their backs to camera are Mrs. Slucher and Mrs. Harter.

ing. He explained that the Councilor for the district, W. Keith Crume, M.D., Bardstown, was ill and unable to attend. John W. Ratliff, Jr., M.D., Lebanon, secretary for the society, made the arrangements.

KSMA President Richard R. Slucher, M.D., Buechel, shared the program spotlight with Thomas M. Marshall, M.D., Louisville, and John S. Harter, M.D., also of Louisville. The latter two presented liberally-illustrated lectures.



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New President Addresses AMA On Personality of Medicine

"The Personality of Medicine" was the subject of the inaugural address of the American Medical Association's new president, David B. Allman, M.D., of Atlantic City, N. J., delivered at the AMA's 106th annual meeting in New York in June. His talk outlined the scientific, emotional and civic sides of a physician's personality.

The most agonizing decisions for the physician are not scientific, but are in the field of human relations, Doctor Allman declared. Sometimes, he said, the physician must face the fact that he is helpless, that nothing he can do can prevent death or save a patient from a lifetime of disability.

"When this happens, the physician—despite his sympathy and concern for the patient—cannot break down emotionally; he cannot become despondent," the speaker said. "He must keep himself mentally and emotionally capable of serving the patient in any crises that may arise. And, above all, he must keep in mind his obligation to all his other patients."



Dr. Allman

UL Receives Markle Award, AMEF and NFME Grants

The University of Louisville School of Medicine received a distinguished national award and two grants from national foundations recently.

The first, the Markle Scholarship, carries a five-year grant totaling \$30,000 to be used in furthering training or research work. It was made through the medical school to a faculty member, Frank Falkner, M.D. J. Murray Kinsman, M.D., dean of the Medical School said the scholarship is the first received at the U of L. Dr. Falkner, a Britisher, is an assistant professor of child health.

The other grants—one for \$39,570, from the National Fund for Medical Education, and the other for \$9,093, from the American Medical Education Foundation—will be used to help with the school's general operating expenses.

SAMA Creates Public Relations Post

The Student American Medical Association, 50,000-member organization with headquarters in Chicago, has announced the appointment of a public relations director. Named to fill the newly-created post was William (Bill) Barr, who also will be managing editor of the association's publication, *The New Physician*, and director of its foundation program.

The *New Physician* will step up to a 12-month-a-year publication from the present nine-month-a-year schedule in the new 1957-1958 publication year, an-

nounced Russell F. Staudacher, SAMA executive secretary. The periodical, which has a circulation of 52,106, is the only national monthly magazine speaking officially for medical students, interns and residents. The SAMA's seventh annual convention, held May 3-5 in Philadelphia, attracted an attendance of 2,000.

AMA Public Relations Institute To Be In Chicago Aug. 28-29

State and county medical society executives and public relations personnel are especially urged to attend the American Medical Association's 1957 Public Relations Institute scheduled for August 28-29 at the Drake Hotel in Chicago.

The opening session will deal with three problems of medicine and publicity: Development of stories of national significance by science writers, coverage of local medical news by the working press, and ethical considerations of distinguishing between advertising and legitimate medical news.

AMA's new film for the public—"Whitehall 4-1500"—will be premiered during Wednesday's luncheon. The film tells the story behind this phone number, which puts a caller in touch with America's physicians as a group—The AMA headquarters in Chicago. The two-day program will also include group and panel discussions.

Lexington to Build Medical Center

A permit for construction of a new medical center in Lexington, Ky., has been authorized by that city's Board of Adjustment, which approved the southwest corner of Nicholasville Road and Southland Drive as the site for the \$1 million project.

Plans call for a three-story building with between 31,000 and 32,000 square feet of floor space and providing for 50 office suites for doctors, an apothecary, an orthopedic shop and a coffee shop. The structure is expected to be completed in about eight months.

Health Dept. Sponsors Conference

A four-day conference on cancer, rheumatic fever and rheumatic heart disease and mental retardation was sponsored by the State Department of Health, June 4-7 at the Henry Clay Hotel in Louisville. Both local and national speakers were on the program.

Appearing with representatives of various divisions of the Department of Health were executives of the Kentucky Division of the American Cancer Society, the Kentucky Heart Association, Inc., and the Kentucky Association for Retarded Children.

Edward C. Bowling, Jr., M.D., who has been chief resident in general surgery at Veterans Administration Hospital, Louisville, and assistant instructor in surgery at the University of Louisville School of Medicine, was scheduled to open an office in Lebanon about July 1. He will be associated with B. J. Baute, M.D., and they will limit their practice to surgery. Doctor Bowling was graduated from the U. of L. School of Medicine in 1952 and interned at St. Anthony Hospital, Louisville.



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AMA Cites Tom D. Spies, M.D.

The 1957 Distinguished Service Award of the American Medical Association was won by Tom D. Spies, M.D., head of the Department of Nutrition and Metabolism at Northwestern University Medical School, Chicago, and director of the nutrition clinic at Hillman Hospital, Birmingham, Ala. The award, which carries with it a gold medal and a citation, was presented during the president's inaugural ceremonies at the AMA's annual meeting in New York.

Doctor Spies was cited for his research in nutrition and metabolism and his contribution toward eradicating tropical sprue. Much of his work has been on deficiency diseases.

Diabetic Film Available

The film "Urine Sugar Analysis for Diabetics," developed by the Ames Company, Inc., of Elkhart, Ind., in cooperation with the medical profession, is available to medical and allied professions through the company or one of its representatives.

A ten-minute visual aid to be used in the education of diabetic patients, it shows the relationship between carbohydrates and insulin and explains in lay language the meaning of various diabetic conditions. The Ames Company has cooperated each year with the KSMA Diabetic Detection Drive, according to Carlisle Morse, M.D., chairman.

Drug Firm Gets AMA Award

The American Medical Association, at the opening session of the House of Delegates in New York June 3, awarded to Parke, Davis & Company a citation "for the service it has performed to the public and to the nation through its continuing series of institutional messages published in national magazines, which accurately and dramatically tell the story of medicine and medical progress." The citation was presented by Gunnar Gundersen, M.D., La Crosse, Wis., new president-elect of the AMA, to Harry J. Loynd, Detroit, president of the pharmaceutical firm.

New KSMA Members

The following physicians have been added to the KSMA membership roster since The Journal's last report:

Dorothy Y. C. Ma, M.D., Louisville.

Walter R. Morris, M.D., Cloverport.

Kentucky had 320 laboratory-proved cases of rabies in animals in 1956 according to a report of the State Department of Health. Included were 131 dogs, 96 foxes, 35 cattle, 39 cats, and 19 other types of animals. In each group the 1956 figures were higher than in 1955, ranging from 9 per cent higher for dogs to 95 per cent higher for cats. A total of 257 more cases of rabies was discovered during 1956 than in 1955.

If You Were the President of the AMA

Five hundred individual physicians were given a chance to put themselves in the shoes of the president of the AMA recently and asked to suggest the changes they would make in the Association.

These physicians, questioned in a nationwide survey authorized by AMA, most often call for closer ties with the individual physician and for further improvements in public relations.

About one doctor in five thinks AMA should get closer to individual doctors, perhaps pool their ideas on important subjects to get a more accurate indication of their feelings. A smaller percentage thinks there should be a greater representation of young doctors within the Association.

Improved public relations and public information was the second important Association change suggested. Concentration upon these areas was called for by 14 per cent of the doctors.

Nine per cent cite social security or pensions for doctors. One out of twenty requests liberal-

ized hospital affiliation requirements and about the same number suggest higher standards for practice. About five per cent say improvements ought to be made in the Journal of the A.M.A.

Smaller percentages (3 per cent) say opposition to government medicine should be strengthened by the Association and 2 per cent call for elimination of fee-splitting. Increased postgraduate training is also suggested by 2 per cent.

About one doctor in ten says he thinks the Association needs no improvements—that it's satisfactory as it is.

Medico-Legal Booklet Issued

A booklet on the Standard of Professional Procedure Governing Attorneys and Physicians was recently prepared and distributed by the Campbell-Kenton County Medical Society in cooperation with the Kenton and Campbell County Bar Associations.

According to Jay OHara, Kenton Bar Association president, the Campbell-Kenton medical and legal groups are the first in Kentucky to have undertaken such a program. The standard eliminates an issue concerning the appearance of physicians in court in litigations and the filing of reports by the physicians.

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PERTINENT PARAGRAPHS

At the 29th session of the Council of The World Medical Association in Oslo, Norway, April 29 to May 5, the Editorial Board and the Council approved a plan to devote each issue of the World Medical Journal to special subjects such as "Medical Education," "The Role of the Family Doctor," "Health Education of the Public," "International Medical Organizations," etc. The correspondents from five or six countries will be asked to contribute short articles on these subjects as they are applied or relate to their own country.

The Veterans Administration has tightened up its policy on hospitalization of non-service connected cases where the veteran is covered by workmen's compensation, the American Medical Association reported in its Washington letter of June 7. The action followed conferences between representatives of the AMA and officials of the VA and other federal agencies. Under the new policy, hospitals are instructed to follow this procedure in such cases: 1. Once it has been established the veteran is covered by workmen's compensation, he will be asked to review his oath of "inability to pay" for private treatment and to agree to his transfer to another (non-VA) hospital when his condition permits. 2. If the veteran still refuses to change, he will be informed that this information will be transmitted to VA headquarters in Washington.

The full color, 16 mm., sound film entitled "Monganga," which received such wide acclaim when twice broadcast over national television hook-up, is now available for showing at medical society groups. This film, which was presented in cooperation with the American Medical Association by Smith, Kline and French Laboratories, deals with the work of John Ross, M.D., a medical missionary in the Belgian Congo. The Headquarters Office of KSMA will be glad to assist any county society in obtaining a copy of this film.

The physician population of the United States totaled 229,876 at the close of 1956, an increase of 3,804 over the preceding year, according to figures released by the American Medical Association's Council on Medical Education and Hospitals. During 1956, a total of 7,463 physicians received their first licenses to practice medicine, as compared with 3,569 physician deaths.

A 30-session postgraduate course in PEDIATRIC ALLERGY has been announced by the New York Medical College, Department of Graduate Pediatrics, to be held from November 6, 1957 through May 28, 1958. The fee is \$300. The course includes lecture-seminars, laboratory and clinical procedures, clinic work and animal experimentation. Applicants must be certified in pediatrics or have certification requirements. Write: Office of the Dean, New York Medical College, 5th Ave. at 106th St., New York 29, N. Y.



This is Ireland Army Hospital, newly-constructed hospital at Fort Knox, which was the scene recently of the Second United States Army Medical Conference—the first meeting of its kind in any United States Army area. Attended by civilian doctors and military medical men, the conference was held for the purpose of assimilating civilian and military medical knowledge to give soldiers and their dependents "optimum" care in the Second Army hospitals. Doctors from Baltimore, Philadelphia, Harrisburg, Richmond, Nashville, Akron and other cities gave their opinions.

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NEWS ITEMS

R. Glen Spurling, M.D., Louisville neurosurgeon, was awarded the honorary degree of Doctor of Science by the University of Missouri, Columbia, June 8. Doctor Spurling is the author of five textbooks, one of which, "History of Neurosurgery In World War II," is based on his experience as chief consultant of Army neurosurgery before and during the Allied invasion of Europe.

David Nelson, M.D., has resumed his practice of general medicine in Louisville, at 4131 W. Broadway, after two years with the Army Medical Corps. A graduate of the University of Louisville School of Medicine in 1943, Dr. Nelson interned at Louisville General Hospital. He held the rank of major as commanding officer of the Army hospital at Verdun and chief of medicine at the La Rochelle installation in France during his military service.

Legito Berzina, M.D., wife of a physician assigned to the Fort Campbell Army Hospital, is the new health officer of Christian and Trigg Counties—the first woman ever to hold that post. A native of Latvia, Doctor Berzina was graduated from the University of Minnesota School of Medicine in 1955. She and her husband, Hubson Berzina, M.D., have been living in Hopkinsville since last September.

Charles Nicholas Cavanaugh, Jr., M.D., has opened offices at 137 Pin Oak Drive, Lexington, for the practice of internal medicine and cardiology. A Lexingtonian, Doctor Cavanaugh was graduated from Harvard Medical School in 1949 and served his internship and residency in medicine at University Hospitals in Cleveland, Ohio. He held a fellowship in medicine at the Cleveland Clinic in 1952-53, engaged in private practice in Cleveland in 1953-54, and was associated with the John C. Thompson Clinic, Lincoln, Nebr., in 1955-56.

Selby Love, M.D., has been elected president of the Louisville Pediatric Society, succeeding J. J. Glaboff, M.D. Patrick Hess, M.D., was made secretary of the society and E. Paul Scott, M.D., was chosen president-elect.

Milton M. Green, M.D., has been appointed superintendent of the Western State Hospital, Hopkinsville, to succeed Jakabs Knezinskis, M.D., who resigned, according to announcement by the State Department of Mental Health.

The Fulton-Hickmon Medical Society Auxiliary has announced a \$100 scholarship to be awarded this year to a student in nursing. Full information on the project may be obtained from Mrs. J. A. Poe, Fulton.

In Memoriam

LLEWELLYN F. HEATH, M.D.
Georgetown
1872 - 1957

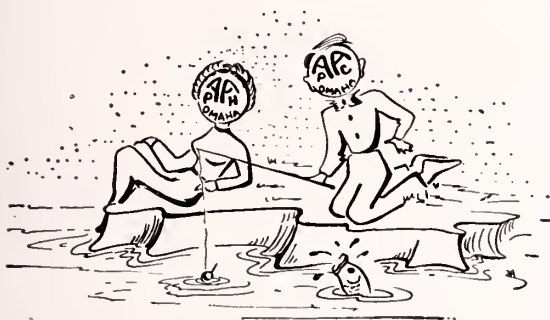
A Georgetown physician from 1904 until his retirement in 1952, Doctor Heath died May 13 in a Lexington nursing home. He was 85.

Doctor Heath, a graduate of the old Hospital College of Medicine, Louisville, served as deputy coroner of Scott County from 1950 to 1955. He was an elder of the Georgetown Christian Church.

J. H. HUTCHINGS, M.D.
Maysville
1880 - 1957

Doctor Hutchings, retired Maysville physician, died May 28 at Haywoods Hospital in Maysville, where he had been a patient for 28 days. He was 77.

A Nicholas county native, Doctor Hutchings spent most of his life in Mason county. He was a former director of the Mason County Health Department and was physical examiner for the Mason County Draft Board during World War I. Since his retirement from the practice of medicine he had devoted his time to the management of his farm at Beechwood.



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C. B. RANKIN, M.D.
Monticello
1871 - 1957

A physician for 59 years, Doctor Rankin died unexpectedly of a heart attack June 11 at his home in Monticello. He was 86.

Doctor Rankin practiced at Rowena and Science Hill before moving to Lexington in 1918. A few years later he located in Monticello. He was active in civic affairs and was chairman of the board of elders of First Christian Church. He was president of the Monticello Banking Company.

WILLIAM H. EMRICH, M.D.
Louisville
1884 - 1957

A heart attack June 2 claimed the life of Doctor Emrich, 73-year-old Louisville surgeon, just a day after he celebrated his 51st year in the medical profession. He died at his office-home shortly after being stricken.

Doctor Emrich graduated in 1906 from Kentucky University School of Medicine, one of the schools later consolidated with the University of Louisville School of Medicine. From 1920 to 1932 he conducted a private surgical hospital. He was a member of the American Medical Association and the Jefferson County Medical Society, and a past president of the Muldraugh Hill Medical Society.

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Special Articles

(Continued from Page 631)

Training In Preventive Medicine

From the above discussion it becomes clear that the physician who practices in the community must have suitable training in preventive medicine. He need not have the technical training required of the health officers but he must be prepared to practice preventive medicine. The essential training of the physician should be twofold:

1. Training in matters relating to public health responsibilities to his community as a practicing physician.
2. Training and experience in the incorporation of preventive principles in dealing with his individual patients in private practice.

This training can often be planned as a co-ordinated exercise of the Departments of Preventive Medicine and Curative Medicine. The essential thing is that the medical student be imbued with the idea that preventive medicine is an integral part of medical practice.

IN MEMORIAM

BYRON R. CONLEY, M.D.
 Salyersville
 1882 - 1957

A native of Magoffin County, Doctor Conley died May 3 in the Bellefonte Hospital, Ashland, at the age of 74. He had practiced medicine in Salyersville the past 26 years.

Graduating from the University of Louisville School of Medicine at 23, Doctor Conley began his practice in Magoffin and Morgan Counties and later moved to Boyd County. Doctor Conley was a member of the Masonic Lodge and Medical Society in Salyersville.

J. R. POPPLEWELL, M.D.
 Jamestown
 1902 - 1957

Doctor Popplewell, 55, died May 9 in the Kentucky Baptist Hospital, Louisville, two days after being stricken in his Jamestown office. He had been in ill health for several years.

A native of Russell Springs, Doctor Popplewell began the practice of medicine in Jamestown in the early 1930's. He was graduated from the University of Arkansas Medical School and served an internship in a Little Rock clinic.

County Society Reports

McCracken

A motion that ambulances, fire trucks and police vehicles abide by National Safety Council rules was passed unanimously by the McCracken County Medical Society at its regular monthly meeting May 14, following the meeting of the Southwest Medical Association.

The action was taken in answer to a letter from Lloyd C. Emery, city manager of Paducah, asking the Society's opinion on the advisability of adopting an ordinance restricting the use of sirens and lights on ambulances. Specifically, he wanted to know if observance of traffic signals would materially affect the welfare of emergency patients. The motion passed by the Society said the risk involved of speeding through traffic and busy intersections was not justifiable.

A letter was read from Clyde C. Sparks, M.D., speaker of the KSMA House of Delegates, regarding the proposed change in the Constitution. The proposed Resolution E concerning the regulation of fees was read.

Appointment of the following committees was announced: Speakers Bureau—O. Leon Higdon, M.D., chairman, Walter R. Johnson, Jr., M.D., and William B. Haley, M.D.; Legislative—Doctor Johnson, chairman, Doctor Higdon, George H. Widener, Jr., M.D., and Charles B. Billington, M.D.

William P. Hall, M.D., chairman of the Voluntary Health Insurance Committee, read a letter from C. V. Thompson, Jr., M.D., requesting the contribution of \$200 toward the enrollment campaign for the Blue Cross Hospital Plan and Kentucky Physicians Mutual May 12-24. After much discussion a motion was passed to table the proposal until certain questions could be answered for the Society.

Doctor Higdon, chairman of the Speakers Bureau, reported that his committee had studied reports to The American Medical Association from various county medical societies where speakers bureaus had been established, and that all of them were favorable. Elbert W. Jackson, M.D., moved that the committee be given a vote of confidence in order that details can be worked out for the McCracken Society. The motion passed unanimously.

C. P. Orr, M.D., announced that the transfer of Benjamin F. Bradford, M.D., to Metropolis, Ill., had created a vacancy for alternate delegate. Charles W. Harting, M.D., was elected by acclamation.

An International Conference on Ultrasonics In Medicine will be held at the Statler Hotel in Los Angeles, September 6-7, it is announced by John H. Aldes, M.D., Los Angeles, secretary. The meeting will cover the biological and physiological principles, as well as the clinical aspects, of ultrasonics in medicine.

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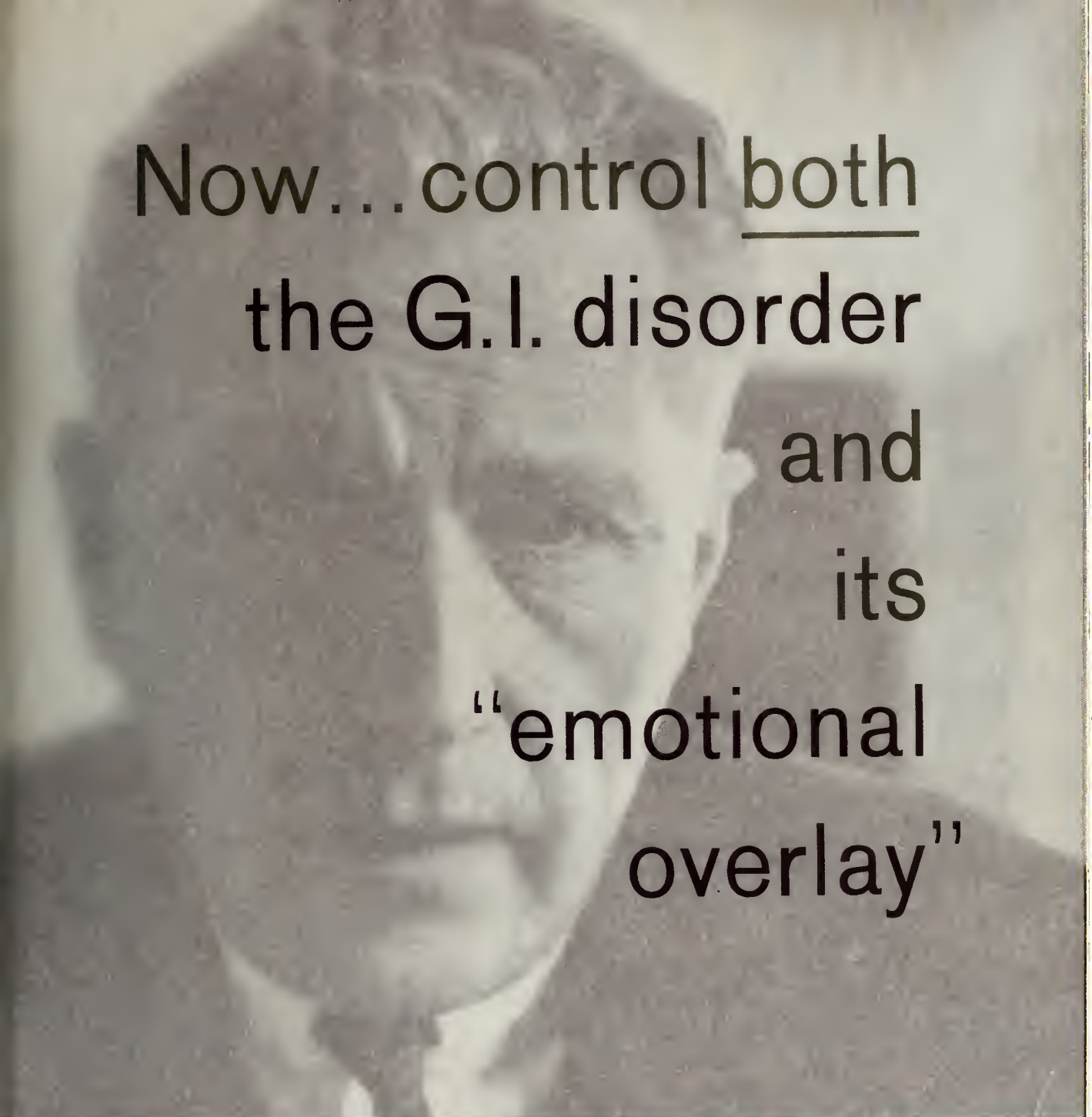
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References: 1. Borrus, J. C.: *M. Clin. North America*, In press, 1957. 2. Gillette, H. E.: *Internat. Rec. Med. & G. P. Clin.* 169:453, 1956. 3. Pennington, V. M.: *J.A.M.A.*, In press, 1957. 4. Cayer, D.: Prolonged Anticholinergic Therapy of Duodenal Ulcer. *Am. J. Dig. Dis.* 1:301-309 (July) 1956. 5. McGlone, F. B.: Personal Communication to Lederle Laboratories. 6. Texter, E. C., Jr.: Personal Communication to Lederle Laboratories. 7. Bauer, H. G. and McGavack, T. H.: Personal Communication to Lederle Laboratories.

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*Ferguson, J. T., and Linn, F. V. Z.: Antibiotic Med. & Clin. Therapy 3:329, 1956.



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1. Cornbleet, T., and Barsky, S.: The Role of the Tranquilizing
Drugs in Dermatology, presented at 115th Annual Meeting of
Illinois State Medical Society, May 19, 1955.

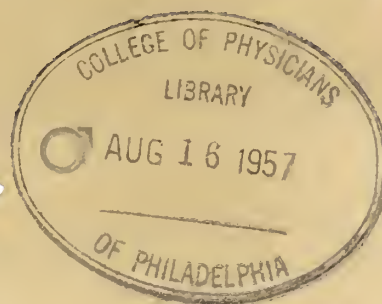
*T.M. Reg. U.S. Pat. Off. for chlorpromazine, S.K.F.

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THE JOURNAL

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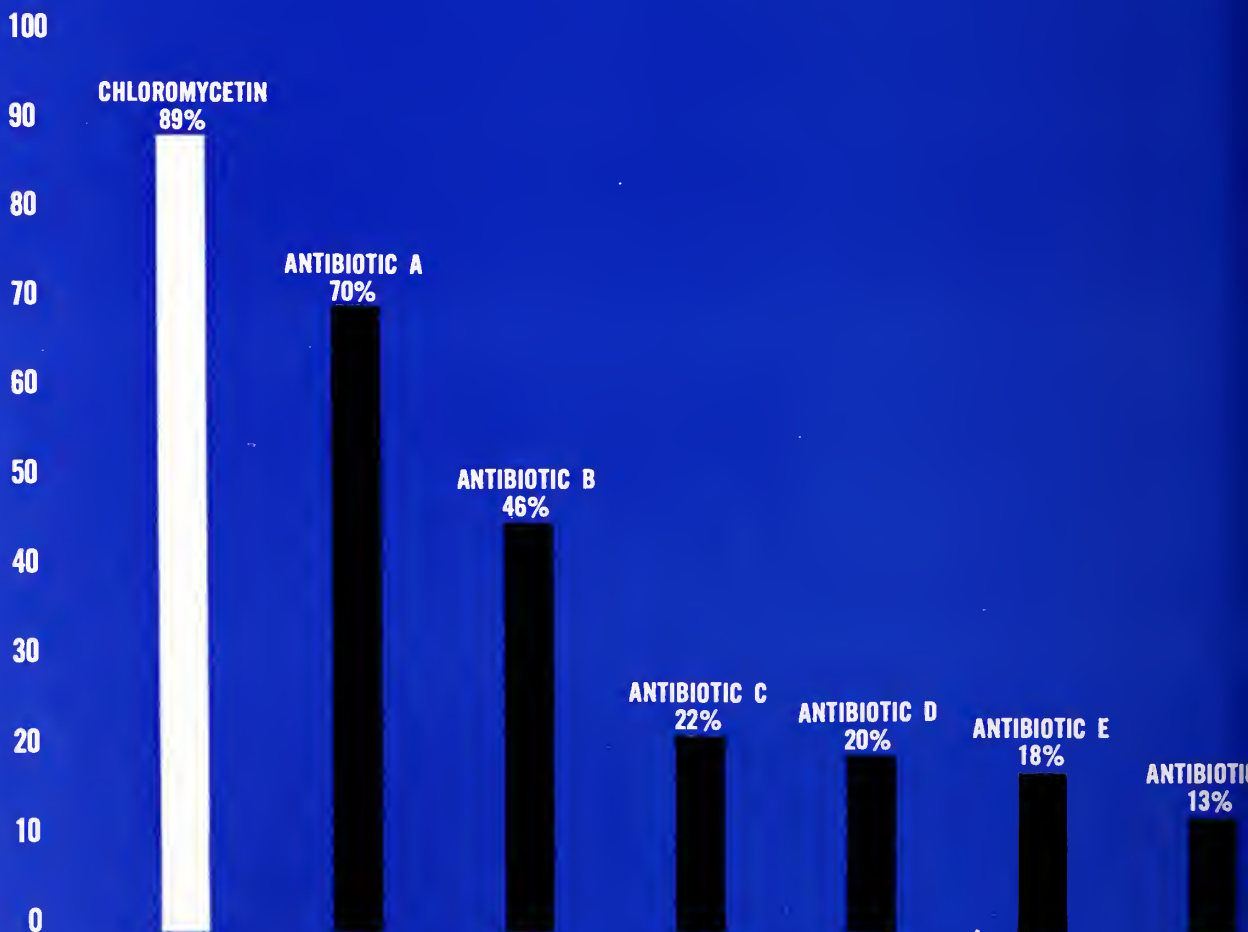
Annual Meeting Issue

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KSMA
Annual Meeting
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*This graph is adapted from Kempe.¹ The single bar designated as "Antibiotics F" represents three widely used, chemically related agents grouped together by the investigator in his study.

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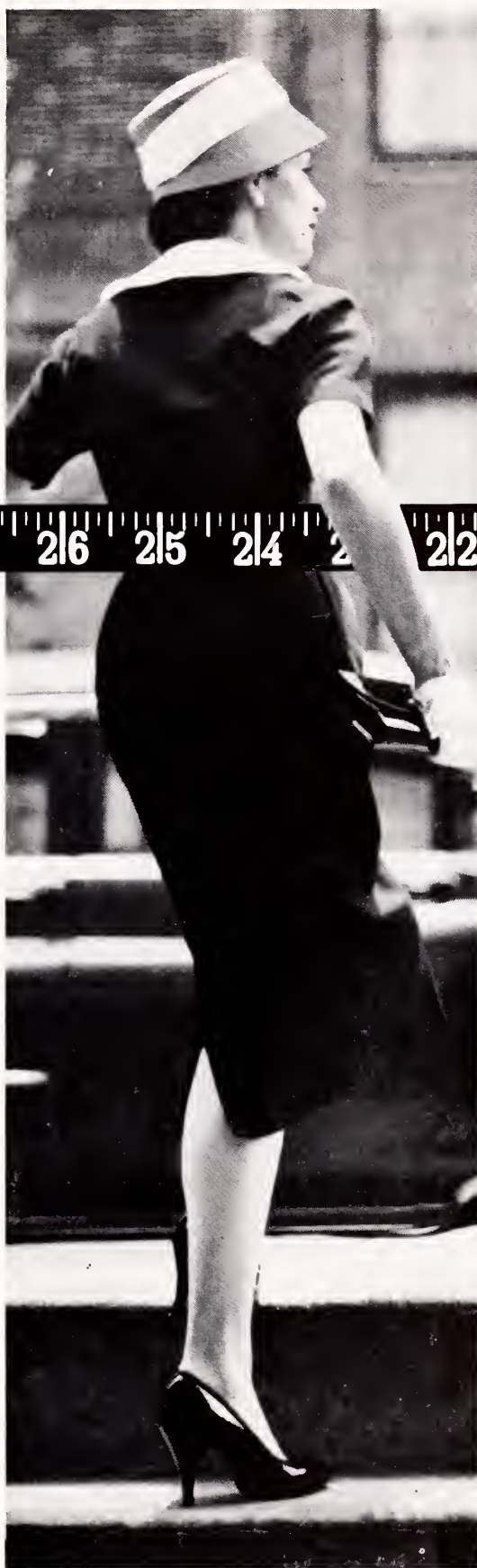
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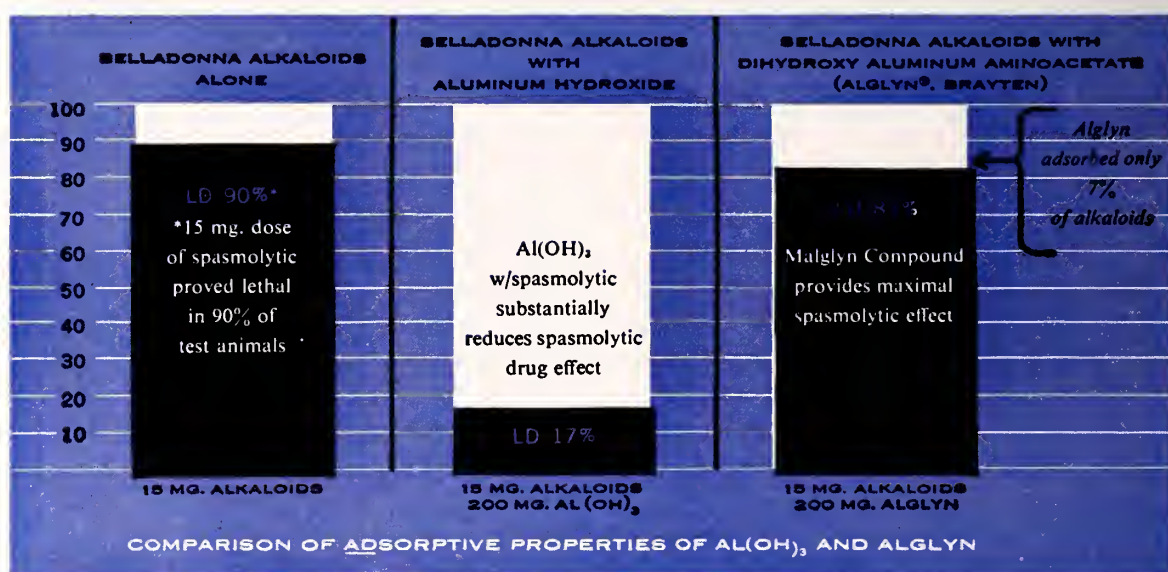
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**message
from
the
President**

You would be as enthusiastic as we are about the 1957 Annual Meeting, if you could have participated in planning the excellent program that will be presented in Louisville September 17, 18, and 19. The usual large attendance is expected at this meeting, which promises to be among the best, and we are looking forward to seeing you.

Have you ever analyzed the reasons why our Annual Meeting ranks with the very best among the smaller state medical associations? Have you ever pondered what has had to be done the past decade in order to make our state meeting rank at the top in percentage of member attendance?

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IN THE BOOKS



THE FIGHT FOR FLUORIDATION: by Donald R. McNeil, Ph.D.; published by Oxford University Press, New York, N. Y., 1957. 241 pages. Price, \$5.

This book is a history of the political and propaganda battles about the fluoridation of community water supplies, starting with the times before there was much evidence concerning the value or safety of artificial fluoridation. At that time, the American Dental Association and the United States Public Health Service were not ready to endorse the program and non-experimental fluoridation was started by a few far-sighted individuals in a few forward-looking communities. Since those times, experimental studies have proved both the value and the safety of fluoridation and both the ADA and the USPHS unreservedly endorse the program.

Much of the opposition to fluoridation in the early days was sincere. Many of the early opponents reversed their positions and became proponents when the evidence was in. Some of the opposition then, as now, came from persons who entered the fight for the sake of fighting, or for publicity. Much was made of the issue of "personal liberty," disregarding the need for sacrifice of some personal liberty if a civilized community is to be maintained. This same point was raised against vaccination and other inoculations against disease, against chlorination of water, pasteurization, and progress in general.

Food faddists saw in fluoridation an attack on their pet theories. Some persons had financial reasons for opposing fluoridation—they wanted to sell vitamins or fluoride pills or "naturalized Salt." Some of the opponents were plain quacks and some sought to gain from the perpetuation of the controversy itself.

The fight for and against fluoridation often became a battle of personalities in which the merits of the program were hidden. Mistakes by proponents were used by opponents to divert attention from the substance of the argument through charges of fraud. A few objectors became a host in the propaganda of the opposition. A few persons who had done a little research and some who had only opinions became "authorities." Tactics of the opposition included use of respected names without consent and use of statements without permission and out of context. The professions were uninformed, and pseudo-medical quacks had a field day.

At one time or another the fluoridation program has been called a Communist plot, a Nazi plot, a Jewish plot, a plot to poison the people, to weaken them to make them easy prey for an aggressor, the first step in socialized medicine, totalitarianism, Marx-Hitler dogma, and forced medication.

This book is of value because it portrays in the

history of the fight the same tactics as are now being used by the opponents of fluoridation. More and more communities are adopting fluoridation, but the opposition continues and, because of it, the children in certain communities are being deprived of the benefits of fluoridation.

The book has a bibliography, an index, and an essay on sources of information. It does not attempt to review the scientific or health aspects of the subject.

Dan Y. Burrill, D.D.S.
School of Dentistry
University of Louisville

PRINCIPLES OF UROLOGY: by Meredith F. Campbell, M.D. Published by W. B. Saunders Company, Philadelphia, Penn., 1957. 622 pages.

This book has been written as an introductory text book to the diseases of the urogenital tract. It represents another attempt to present the principles of urology in a form adaptable both for instruction of the student and for guidance of the practitioner.

Unfortunately, neither goal is quite attained. However, the book is best suited for use as a teaching text.

The subject matter is presented in an orderly manner and follows the usual pattern found in other texts of this sort. There is an adequate discussion of urologic symptoms, history, examination, and tests. The applied anatomy and physiology of the urogenital system is presented in a practical and satisfactory manner. The same is true of the section on embryology.

It is felt, however, that there is a great deal to be desired in the coverage of the more common urologic diseases. This deficiency is most noticeable in the discussion of the treatment of many of the urologic problems. The author seems to feel that the student and the practitioner do not need to know too much about the methods of treatment employed in urology, but that these secrets are for the urologist.

It is also interesting to note that the so-called medical diseases of the kidney, such as nephritis, have been omitted from this book, and this would seem to be a mistake in a text designed for teaching.

As with other books written by Doctor Campbell, the greatest fault of the book is the literary style of the author. Doctor Campbell has a flair for expressing himself in long, complicated sentences which make reading his works a tedious task. Despite an obvious effort on his part to overcome this unhappy propensity, he has not written a book which the average student will read with enjoyment. This is unfortunate because Doctor Campbell has a great store of urological experience, particularly pediatric, to pass on to the student.

George A. Sehlinger, M.D., F.A.C.S.



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WASHINGTON NEWS DIGEST



Washington, D. C.—The economy drive to the contrary notwithstanding, health spending by the Department of Health, Education, and Welfare for the fiscal year that began this July already is assured of surpassing last year's record by some \$33 million. This assumes, of course, that no further requests will be made by HEW for supplemental funds, a practice common in government for many years.

Research programs were the most favored by legislators, many of whom spoke out against federal spending by other agencies. But when the health budget came up for debate, the economy oratory subsided.

In only one instance was a health program cut back. And to the surprise of many, it occurred in the Senate which traditionally restores budget cuts originating in the House. A sum of \$45 million was voted, instead of the House-approved \$50 million, for grants to states for sewage treatment works construction. But then the Senate wrote in language permitting states to get their maximum allotments a full year after the fiscal year ends.

The Hill-Burton hospital construction program received \$3.8 million less than last year but only because the administration asked for \$121.2 million instead of the \$125 million appropriated last year.

The National Cancer Institute received the largest dollar increase of any health item in the budget. The increment was \$8 million over last year. The administration had asked for \$48.4 million, the House voted \$46.9 million, and the Senate raised this to \$58.5. It was finally compromised at \$56.4 million.

Congress obviously agreed with the views expressed by the Senate Appropriations Committee: "... the committee is fully aware that it is providing funds for cancer research, the outcome of which is unknown. On the judgment of those who are scientifically most competent, the committee is fully willing to risk the investment on the ground that the chance of a big payoff is a reasonable one. Such risks are inherent in research."

The Institute of Arthritis and Metabolic Diseases fared well, too, getting a total of \$20,385,000 compared with last year's \$17,885,000. And the Senate Committee charged the institute with taking leadership in research on effects of radiation on the human organism.

The Mental Health Institute's spending has been going steadily upward, and this year it was given another boost with a final appropriation of \$39,217,000, an increase of about \$4 million. Other research totals for the current year: National Heart Institute, \$35,936,000; Neurology and Blindness Institute, \$21,387,000; Allergy and Infectious Disease Institute, \$17,400,000.

On only one score did the research advocates lose out. The House view prevailed in conference on the setting of a 15% ceiling on additional overhead costs allowed schools and other institutions getting federal grants. This question which drew considerable attention in hearings is likely to be reopened. Congress wants a General Accounting Office study by the end of this year.

In voting a \$5 million increase (to \$22,592,000) for general public health assistance to the states, Congress was reaffirming its support of helping local health departments increase their professional staffs and broaden their services. The Senate Committee report contained this significant language:

"... with a population increase of more than 20 million during the past decade, there are no more organized health departments than there were 10 years ago. This means that 18 million people are living in areas with no full-time organized community health services, and millions more live in areas where such services are only fragmentary."

A few days later, the Public Health Service announced plans for a broad survey of rural health needs, particularly in sparsely settled areas. It picked for its first study Kit Carson County, Colo., an area known for its scattered farm population, low income level and adverse climatic conditions.

CAPITAL NOTES:

The President has signed into law a two-year revision of the doctor draft law permitting selective call-up of physicians to age 35 if they were deferred from regular draft service to complete professional training.

The Public Health Service has conferred with the American Medical Association on medical manpower plans in event of an epidemic of the new Far East influenza.

The poliomyelitis vaccine act expired July 1 with all but \$400,000 of \$53.6 million taken up by states for inoculation programs. An estimated 29 million children and pregnant women received 70 million injections.

The National Library of Medicine no longer is lending books and other material over the counter to individuals; requests must be channeled through other libraries. ... The administration bill on federal workers health insurance has been introduced; it combines both basic and major medical coverage.

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PUBLIC HEALTH PAGE

New Far East Influenza in Kentucky

RUSSELL E. TEAGUE, M.D., Commissioner of Health

State of Kentucky

Within three months from the time a new and highly virulent strain of influenza (type A) virus was found in the Far East, it has been introduced into Kentucky. The rapidity with which this new virus strain has spread across the world illustrates well how quickly viral respiratory epidemics can move.

During April and May the World Health Organization and United States Public Health officials had been carefully watching and identifying the Far East strain of influenza virus as it appeared in Malaya, Japan, India, the Philippines, and Hawaii. By early June this influenza had arrived in California with returning travellers and servicemen. On June 7th the U.S. Public Health Service issued an alert to all states calling attention to the presence of this disease in both California and Rhode Island and asking the fullest cooperation of every state in determining its spread.

The Kentucky State Department of Health realized the need for cooperating completely with all national and international agencies for control of influenza, and released a bulletin on June 21st to all physicians asking for complete cooperation in its attempt to determine when this new virus might first appear in Kentucky. Instructions were also sent for obtaining throat washings from suspected patients for shipment to the State Health Laboratories in Louisville. None of us anticipated at that time that Far East influenza would arrive so soon or in the following clear-cut manner.

On June 26th the Westminster Fellowship Association held its national meeting at Grinnell College, Iowa, with over 1800 young students attending from 43 states. An outbreak of influenza began in the California delegation on June 28th and the meeting was disbanded on July 1st when over one hundred cases developed. One Kentuckian was hospitalized in Iowa but the other thirty returned by bus to Kentucky on July 2nd. Upon their arrival in Louisville and Lexington, the local county health officers were notified. The Fayette County Health Department met the bus and obtained specimens of throat washings and blood for serological studies from nineteen of the students

—some of whom showed definite signs and symptoms of influenza. The Jefferson County Health Department also obtained similar specimens from the returned students on the following day when a few had developed distinct symptoms of the disease.

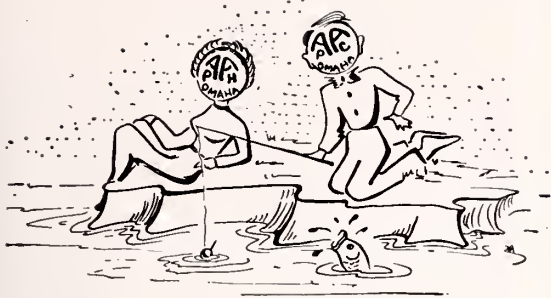
A complete list of all returning students was given the State Health Department and all ten counties to which these students had returned were alerted of the possible arrival of influenza into their areas.

By July 3, the State Department of Health Laboratories processed the sputum specimens obtained from the local health departments. Within five days it had not only succeeded in isolating the influenza virus from these sputa but also had identified it as the Far East strain of influenza—identical to that strain which had been reported from California and Malaya. This rapid identification of Far East influenza by the new State Virus Laboratory within less than a week after it officially opened was a rigid test of its usefulness and efficiency in an emergency.

As a result of this rapid identification, Kentucky can take credit for being the first to identify the cause of the major outbreak that closed the Grinnell College meetings. All local health departments were notified immediately of the premature and unexpected arrival of this disease in Kentucky. The Communicable Disease Center, Influenza Surveillance Unit of the U. S. Public Health Service and the World Health Organization Influenza Control Unit were immediately notified of the identification of Far East influenza in Kentucky. Thus these two agencies were able to alert all states having students at the Iowa meetings of a potential influenza in their state.

It was a rare opportunity, indeed, that enabled us to so readily pinpoint the entry of a new disease entity into a state. In this instance, it was the excellent alertness of the county health departments and the rapid identification of the virus by our laboratories that is most commendable.

There have been approximately sixty cases of influenza resembling the Far East type in



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PHYSICIANS CASUALTY & HEALTH ASSOCIATIONS

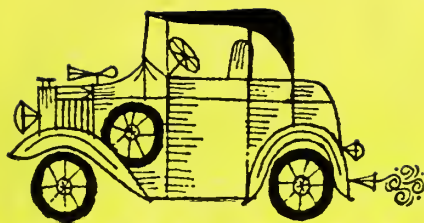
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Since 1902

Kentucky within ten days from the time of introduction into the state. Most of these cases have been contact cases in families of the returning students. However, a second outbreak has occurred in Breathitt County among a religious group that included at least three Californians.

All cases reported thus far in Kentucky have been mild. The disease is characterized by a sudden onset of fever, usually of 100-102° but occasionally reaching 104°. Chills, diaphoresis, weakness, severe frontal headaches and generalized muscle aches are common symptoms. In some cases cough and sore throat with rhinorrhea have been observed. The disease is severe for three days and occasionally lasts six days. There have been fewer than one death in a thousand reported in countries where this influenza has reached epidemic proportions.

We cannot be sure of what the future of Far East influenza will be in Kentucky. Now that it is introduced into the state we cannot afford to do anything but to intensify our local surveillance. Since no vaccine is as yet available commercially to the general public and since



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BRAND OF MECLIZINE HYDROCHLORIDE

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of motion sickness
in minutes**

Pfizer

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no previous influenza vaccines are effective, it will be necessary to keep close and constant vigilance for any evidence of influenza in every area. The cooperation of all physicians in reporting all cases each week is necessary to determine when and if there is danger of an impending epidemic. Only with the fullest help of all physicians together with the local and state health agencies can we hope to fulfill our duty to safeguard the health of Kentucky.

A new 27-page booklet entitled "Congenital Cardiac Defects—A Physician's Guide for Evaluation and Management" and a report entitled "Standards for Centers Caring for Patients With Congenital Cardiac Defects" have been issued by the American Heart Association. The booklet was prepared by the Committee on Congenital Heart Disease of the association's Council on Rheumatic Fever and Congenital Heart Disease. The report appeared originally in the April, 1956, issue of the association's professional journal, *Circulation*. Single copies of both pamphlets are available free from the Kentucky Heart Association, 401 Speed Building, Louisville 2.

The Committee on Arrangements urges that K.S.M.A. members wear their badges at all times while attending the Annual Meeting Sessions at Columbia Auditorium, September 17, 18, and 19.



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COLDS,
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NASAL SPRAY
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Levin, S.J.: *Pediat. Clin. North America* 1:975, Nov., 1954.

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*T.M.

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PRESIDENT KENTUCKY STATE MEDICAL ASSOCIATION 1957

The JOURNAL *of the*
Kentucky State Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 55

AUGUST, 1957

NO. 8

OFFICERS OF KENTUCKY STATE MEDICAL ASSOCIATION



RICHARD R. SLUCHER, M.D.

President

EDWARD B. MERSCH, M.D.

President-Elect

Doctor Mersch, Covington surgeon, who has served on the Council of KSMA since 1949, will become president of the Kentucky State Medical Association at the close of the 1957 annual meeting.

Born in Covington on November 20, 1908, Doctor Mersch attended parochial schools and received his B. S. degree from Xavier University in 1931. In 1935 he graduated from the University of Cincinnati College of Medicine and started his internship at St. Elizabeth Hospital, Covington.

Doctor Mersch received his post graduate training in surgery at General Hospital in Louisville from 1936-39. He started his present private practice in general surgery in 1939.

A member of the staff of St. Elizabeth Hospital, he also serves on the courtesy staff of Booth Memorial and St. Luke Hospitals in Covington. From 1940-50 he served as clinician in surgery at Cincinnati General Hospital and from 1940-56 he served on the staff of Children's Hospital in Cincinnati.

In 1940, he married Margaret Rettig. They have one daughter, Mary Margaret.

He has demonstrated his capacity as a leader during his service to KSMA as a member of the Council since 1949. Doctor Mersch has also served faithfully on the executive and budget committees of the Council.

Long active in medical affairs, Doctor Mersch is a member of the Southern Medical Association, the Southeastern Surgical Congress, and the Campbell-Kenton Society. He is a fellow of the American College of Surgeons.

A past president of the Covington Lions Club, Doctor Mersch has for many years had a deep and active interest in his community. His hobbies reflect a variety of interests. He is a photography fan, is interested in gardening, specializing in orchid growing, and dabbles in oil painting.

Deep loyalty to his profession and his effectiveness in accepting and discharging responsibility, plus his demonstrated success as a leader in KSMA, indicated to the House of Delegates that in choosing Doctor Mersch as president-elect, it was living up to the high standards set previously for this important position.

Vice-Presidents

CARL NORFLEET, M.D.

Somerset

Recipient of KSMA's Distinguished Service Award in 1951, Doctor Norfleet has been an active and loyal member of the Association for many years.



Born in Pulaski County in 1881, he was graduated from the Hospital College of Medicine, Louisville, in 1905 and began his practice in Silerville. In 1908 he located at Somerset, where he practiced until 1917, when he entered the Army Medical Corps for service in World War I.

He served as director of the Pulaski County Health Department from 1948 to 1953 and was a member of the County Board of Health for more than 40 years.

Doctor Norfleet has served KSMA as Councilor of the Seventh District and of the new Twelfth District.

KARL D. WINTER, M.D.

Louisville

Doctor Winter, who received his medical degree in 1915 from the University of Louis-



ville Medical Department, has been a leading figure in the development of the Alumni Association of his alma mater, now the University of Louisville School of Medicine.

Through his activities in KSMA and the Jefferson County Medical Society, he has been a valuable asset to organized medicine at both the state and county level.

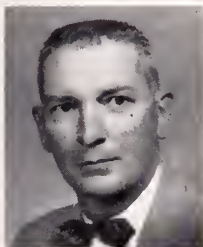
He is a member of the International College of Surgeons and the Southeastern Surgical Society.

Doctor Winter was elected a KSMA vice-president in September, 1956.

CHARLES R. YANCEY, M.D.

Hopkinsville

Doctor Yancey, a physician in his birthplace, Hopkinsville, was elected a vice-president of the Kentucky State Medical Association in 1956.



A 1937 graduate of the Vanderbilt University School of Medicine, Nashville, he interned for three years in three Nashville hospitals; the Davidson County Tuberculosis, St. Thomas and Protestant

Hospitals. He finished his surgical training in Lahey Clinic, Boston.

Doctor Yancey was in the military service from 1941 to 1946, after which he returned to Hopkinsville to establish his practice.

Included in his services to KSMA was a term as a member of the Board of Consultants of The Journal.

Secretary

WOODFORD B. TROUTMAN, M.D.

Louisville

Doctor Troutman was elected at the 1956 session of the House of Delegates to serve out the unexpired term as secretary when the office became vacant with the resignation of Bruce Underwood, M.D.

Prior to that time, the offices of secretary

and editor were combined, but at the 1956 Annual Meeting, the House voted By-law changes separating the two offices.

Treasurer

WOODFORD B. TROUTMAN, M.D.

Louisville

The office of treasurer of the KSMA has been held by Doctor Troutman since 1946, and his long and efficient service has been a valuable contribution to the Association.



A native of Bullitt County, Doctor Troutman was graduated from the University of Louisville School of Medicine in 1921.

He interned at McKeesport in Pennsylvania and Bellevue Hospital in New York.

After practicing general medicine in Louisville for five years, he left in 1929 to study in Vienna, London and Edinburg, specializing in cardiology. Returning to Louisville in 1930, he began practicing his specialty. He served in the Army Air Force during World War II.

Doctor Troutman holds membership in the American Heart Association, the American College of Physicians and the American Medical Association.

Editor

Guy Aud, M.D.

Louisville

For the first time in the memory of the oldest KSMA members, the same physician has not served as both secretary of KSMA and editor of the Journal of KSMA. By-law changes, voted by the 1956 session of the House, provided for the separation of the two offices and the selection of the Editor by the Council.



Guy Aud, M.D., Louisville, who held the key position of chairman of the Advisory Com-

mittee to the Editor during the previous administration, was unanimously elected by the Council at its re-organization meeting last September 20, to the office of editor. Doctor Aud's previous experience and excellent contributions to the recent improvements in the Journal, led the council to its choice.

Doctor Aud has served as president of the Association, has been councilor from his district and has had numerous committee assignments including chairmanship of the committee that re-wrote the By-laws in 1950. Doctor Aud has also been active in the Jefferson County Medical Society and has served as president of the American Cancer Society.

Speaker

CLYDE C. SPARKS, M.D.

Ashland

President of the KSMA in 1955, Doctor Sparks has been active in many medical groups.



He is a Fellow of the American College of Surgeons and of the Kentucky Surgical Society, a charter member and past president of the Kentucky Society for Obstetrics and Gynecology, a member of the Southeastern Surgical Congress, and a member of the Boyd

County Medical Society in which he has held various offices.

Born in Lawrence County, the son of a country doctor, Doctor Sparks received his B. S. degree from Georgetown College in 1924, and was graduated from the University of Louisville School of Medicine in 1932. He taught at Campbellsville Junior College from 1924 to 1927.

Doctor Sparks served as president of AOA in 1931 and was on the Surgical House Staff of Louisville City Hospital, now known as General Hospital, from 1932 to 1934. After practicing industrial medicine in Fleming, Ky., he located at Ashland in 1936.

During World War II, Doctor Sparks served three and a half years with the United States Navy.

Vice-Speaker

GEORGE W. PEDIGO, JR., M.D.

Louisville

A practicing physician and assistant professor of medicine at the University of Louisville School of Medicine, Doctor Pedigo was elected Vice-Speaker in 1956.



Active in the KSMA, he has also served as secretary and treasurer and as chairman of various committees of the Jefferson County Medical Society.

Doctor Pedigo was graduated in 1938 from the University of Louisville School of Medicine and did his residency work at the Louisville City Hospital, now known as General Hospital.

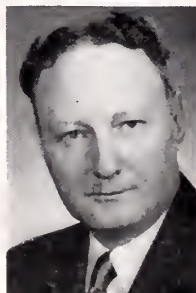
He is a member of the American College of Physicians, a diplomate of the American Board of Internal Medicine, and a past president of the Louisville Society of Internal Medicine and the St. Joseph Infirmary Medical Staff.

Delegates to the AMA

W. CLARK BAILEY, M.D.

Harlan

Elected a KSMA delegate to the AMA in 1944, Doctor Bailey has held the office since that time, with the exception of the two years he was KSMA president-elect and president in 1950 and 1951. He was vice-president of the AMA in 1954-55 and is a member of the Association's Legislative Committee and Committee on Medical Care of Workers in the Bituminous Coal Mining Area. He



has also served on many KSMA committees.

Doctor Bailey began the practice of medicine in his native Harlan after graduating from the University of Louisville School of Medicine in 1926. He took his hospital training in Louisville at the Tuberculosis Hospital, the Children's Hospital and the City Hospital, which is now known as General Hospital.

In addition to his medical work, Doctor Bailey has always taken an active interest in the civic and educational life of his city and state.

W. VINSON PIERCE, M.D.

Covington

Doctor Pierce, who has been active in KSMA committee work for a number of years, was an alternate delegate to the AMA prior to his election as delegate in 1955.



A native of Catlettsburg, Doctor Pierce was graduated from the University of Louisville School of Medicine in 1934. He interned at St. Elizabeth Hospital, Covington, and at General Hospital, Louisville, where he served a residency in urology. He was a major in the Medical Corps during World War II.

Doctor Pierce, who limits his practice to urology, is past president of the Kentucky Physicians Mutual, Inc., and a former president of the Kentucky Chapter of the American College of Surgeons and the Kentucky Surgical Society.

Session of KSMA House Is First Under By-Law Change

When the KSMA House of Delegates convenes at 7 p.m. Monday, September 16, at Columbia Auditorium, it will be meeting for the first time since the change in the By-laws calling for reapportionment of delegates from the county societies.

Formerly, one delegate was allowed for each 25 members and an additional delegate for each major fraction of that number. At the 1956 meeting, the word "major" was deleted. It is estimated that the change will increase by approximately 10 the number eligible to serve.

Clyde C. Sparks, M.D., Ashland, Speaker of the House, said reports, new business and resolutions would be introduced at the opening session and assigned to reference committees, which will meet Tuesday afternoon.

The House will reconvene Wednesday night, September 18, at which time the reference committees will present their recommendations for final action by the delegates. At this session the general officers and councilors will be elected.

The KSMA delegates, listed by counties, are as follows:

Adair: George O. Nell, Columbia

Allen: Francis J. Halcomb, Jr., Scottsville
Anderson: Boyd Caudill, Lawrenceburg
Ballard: Goodloe H. Sargent, Barlow
Barren: Clifton G. Follis, Glasgow
Bath: William Johnson, Owingsville
Bell: David C. Asher, Pineville
Boone: Gladys L. Rouse, Florence
Bourbon: Jesse Smith, Paris
Boyd: H. E. Martin, Ashland

Boyle: W. V. Lyon, Ashland
Bracken: Chris Jackson, Danville
Breathitt: C. A. Marquardt, Augusta

Breckinridge: D. G. Miller, Jr., Morgantown
Bullitt: F. T. Linton, Princeton
Butler: Conrad H. Jones, Murray
Caldwell: C. W. Air, Ludlow
Calloway: Carl Kumpe, Ft. Mitchell
Campbell-Kenton: J. J. Rolf, Covington
J. L. Cassidy, Covington
Marc Reardon, Covington

Carlisle: Hugh Williams, Carrollton
Carroll: J. Watts Stovall, Grayson
Carter: K. R. Adams, Liberty
Casey: Delmus Clardy, Hopkinsville
Christian: James L. Becknell, Manchester
Clark: E. A. Barnes, Albany
Clay: Howell Davis, Owensboro
Clinton: A. B. Colley, Owensboro
Crittenden: Charles Wathen, Owensboro

Cumberland: John F. Greene, Sandy Hook
Daviess: S. G. Marcum, Irvine
R. G. Elliott, Lexington
C. C. Johnston, Lexington
N. L. Bosworth, Lexington
John W. Scott, Lexington
T. L. Adams, Lexington
Carl Fortune, Lexington
R. C. Blount, Lexington
R. W. Fidler, Flemingsburg
Russell L. Hall, Wheelwright

Edmonson: Russell Rudd, Fulton
Elliott: George Harris, Warsaw
Estill: Paul Sides, Lancaster
Fayette: Claude C. Waldrop, Williamstown
A. R. Morgan, Mayfield
R. G. Thomas, Leitchfield
J. W. Miller, Greensburg

Fleming: R. T. Routt, Sonora
Floyd: W. A. Litzenberger, Elizabethtown
Franklin: E. M. Howard, Harlan
Fulton: P. J. Begley, Harlan
Gallatin: J. P. Wyles, Cynthia

Garrard: R. T. Routt, Sonora
Grant: W. A. Litzenberger, Elizabethtown
Graves: E. M. Howard, Harlan
Grayson: P. J. Begley, Harlan
Green: J. P. Wyles, Cynthia
Greenup: R. T. Routt, Sonora
Hancock: W. A. Litzenberger, Elizabethtown
Hardin: E. M. Howard, Harlan
Harlan: P. J. Begley, Harlan
Harrison: J. P. Wyles, Cynthia
Hart: R. T. Routt, Sonora

Henderson:	Robert English, Henderson	Morgan:	Alec Spencer, West Liberty
Henry:	W. P. McKee, Eminence	Muhlenberg:	R. E. Davis, Central City
Hickman:	H. E. Titsworth, Clinton	Nelson:	Charles Spalding, Bardstown
Hopkins:	Loman Trover, Madisonville	Nicholas:	B. F. Reynolds, Carlisle
Jackson:		Ohio:	Paul E. Goode, Hartford
Jefferson:	Houston W. Shaw, Louisville	Oldham:	
	John M. Townsend, Louisville	Owen:	
	U. R. Ulferts, Louisville	Owsley:	Caleb Chu, Booneville
	Rudy F. Vogt, Louisville	Pendleton:	Robert L. McKenney, Falmouth
	Benjamin D. Boone, Louisville	Perry:	
	William A. Blodgett, Louisville	Pike:	W. C. Hambley, Pikeville
	Foster D. Coleman, Louisville		Adam Osborne, Pikeville
	Thomas V. Gudex, Louisville	Powell:	
	John Allen, Louisville	Pulaski:	
	William H. Bizot, Louisville	Robertson:	Perry Overby, Mt. Olivet
	Glenn W. Bryant, Louisville	Rockcastle:	J. W. Walker, Mt. Vernon
	Blaine Lewis, Louisville	Rowan:	
	Robert C. Long, Louisville	Russell:	
	Homer B. Martin, Louisville	Scott:	H. G. Wells, Georgetown
	Roy H. Moore, Jr., Louisville	Shelby:	M. D. Klein, Shelbyville
	Robert F. Monroe, Louisville	Simpson:	L. F. Beasley, Franklin
	Henry S. Collier, Louisville	Spencer:	M. H. Skaggs, Taylorsville
	L. Douglas Atherton, Louisville	Taylor:	W. R. Mann, Campbellsville
	McHenry S. Brewer, Louisville	Todd:	J. C. Woodall, Trenton
	W. Burford Davis, Louisville	Trigg:	Elias N. Futrell, Cadiz
	Robert S. Dyer, Louisville	Trimble:	Carl Cooper, Bedford
	J. Thomas Giannini, Louisville	Union:	J. P. Welborn, Morganfield
	Robert Lich, Jr., Louisville	Warren:	Thomas Gilbert, Bowling Green
	Thomas M. Marshall, Louisville		Harold Keen, Bowling Green
	L. H. Segerberg, Louisville	Washington:	Dixie E. Snider, Springfield
	Carroll L. Witten, Louisville	Wayne:	John W. Simmons, Monticello
	J. S. Williams, Nicholasville	Webster:	
Jessamine:	James Archer, Paintsville	Whitley:	
Johnson:		Wolfe:	
Knott:		Woodford:	F. D. Willey, Versailles
Knox:	W. P. Clifton, Barbourville		
Larue:	J. D. Handley, Hodgenville		
Laurel:	E. C. Seeley, London		
Lawrence:	Forest F. Shely, Louisa		
Lee:	J. E. Broadbuss, Beattyville		
Leslie:			
Letcher:	Carl Pigman, Whitesburg		
Lewis:			
Lincoln:	H. I. Frisbie, Stanford		
Livingston:			
Logan:	C. V. Dodson, Russellville		
Lyon:	J. E. Cotthoff, Kuttawa		
Madison:	Douglas Jenkins, Richmond		
	Hubert Jones, Berea		
Magoffin:	Lloyd M. Hall, Salyersville		
Marion:	Eli J. George, Lebanon		
Marshall:	Joe Miller, Benton		
Martin:			
Mason:	C. G. Prindle, Maysville		
McCracken:	Leon Higdon, Paducah		
	Walker Turner, Paducah		
	Walter Johnson, Paducah		
McCreary:	Earl Williams, Stearns		
McLean:	W. G. Edds, Calhoun		
Meade:	George E. Clark, Brandenburg		
Menifee:	D. L. Graves, Frenchburg		
Mercer:	T. O. Meredith, Harrodsburg		
Metcalfe:	E. S. Dunham, Edmonton		
Monroe:	J. Jack Martin, Tompkinsville		
Montgomery:	J. M. Bush, Mt. Sterling		

House of Delegates to Elect KSMA Officers Sept. 18

General officers of the KSMA to be elected by the House of Delegates at its second session Wednesday, September 18, are as follows:

President-elect: (Western Section) one year.

Vice-Presidents: (Central, Eastern and Western Sections) one year.

Delegate to the AMA: (W. Vinson Pierce, M.D., Covington, incumbent) two years.

Alternate delegate to the AMA: (Leon Higdon, M.D., Paducah, incumbent) two years.

The By-laws provide that the Nominating Committee, which was named at the final meeting of the 1956 session, shall announce its candidates at the beginning of the Second Scientific Session on Tuesday afternoon, September 17. The House of Delegates will vote on these nominees at the second session. The By-laws also state that additional nominations can be made from the floor but without discussion.

Reports Procedure Changed at 1956 Session

The report of the Council to the House of Delegates for 1957 was streamlined when the 1956 House voted that only brief highlights of Council action could be reported. Change in committee reports, looking toward conservation of time, were also authorized.

The House directed the Journal of KSMA to publish a digest of minutes of the Council as soon as practicable after each meeting, to make sure that members were acquainted with actions of the Council as they took place. These instructions have been followed.

As a result of the above action, when Council Chairman Hugh Mahaffey, M.D., Richmond, makes his report, it will briefly highlight the important actions of the Council and bring whatever recommendations the Council may have to offer to the House.

The Council has held four meetings, including the re-organization meeting, prior to the Annual Meeting. In addition, the Executive Committee has met three times, the Budget Committee held a day-long meeting, and several special committees have met and reported to the Council during the year.

At the 1956 session of the House five councilors were elected. J. Vernon Pace, M.D., Paducah, of the First District, was elected to succeed himself, as was Keith Crume, M.D., Bardstown, of the Fourth District. Norman Adair, M.D., Covington, was elected Councilor of the Eighth District to fill the unexpired term of Edward B. Mersch, M.D., Covington, who was elevated to the office of President-Elect. Ralph D. Lynn, Elkton, was elected to succeed Delmas M. Clardy, M.D., Hopkinsville, in the Third District. Charles C. Rutledge, M.D., Hazard, was chosen to succeed John Archer, M.D., Prestonburg, in the Fourteenth District. Brief biological sketches of the three new Councilors follow.

RAPLH D. LYNN, M.D.

Elkton

Third District

A native of Toledo, Ohio, Doctor Lynn was graduated from the University of Louisville School of Medicine in 1943 and served his internship at St. Joseph Infirmary, Louisville,

after which he entered military service. He established his medical practice in Elkton in 1946.

Doctor Lynn was chairman of the committee which organized and developed the Kentucky Physicians Placement Service. Active in the work of the Todd County Medical Society, he has served as its secretary and as a member of various of its committees. In addition, he participates in civic and community activities.

He is a member of the board of directors of the Kentucky Chapter, American Academy of General Practitioners.

NORMAN ADAIR, M.D.

Covington

Eighth District

Doctor Adair, a native of Harrison, Ark., attended Central College, Fayette, Mo., before entering the University of Louisville School of Medicine, from which he received his M.D. degree in 1941. He interned at Kansas City General Hospital, after which he served a year as a captain in the Medical Corps.

A resident physician in X-ray at Baylor University Hospital, Dallas, in 1943-44, he spent the next three years at Virginia University, first as resident physician in X-ray, then as assistant radiologist and instructor. He also was radiologist at three hospitals in Virginia before locating in Covington in 1947.

Doctor Adair is a member of the American Medical Association, the Radiological Society of North America and the American College of Radiology.

CHARLES C. RUTLEDGE, M.D.

Hazard

Fourteenth District

Doctor Rutledge took his pre-medical training at Eastern State College in his home town of Richmond, Ky. He was graduated from the University of Louisville School of Medicine in 1942 and interned at Louisville General Hospital from 1942-43, after which he entered the military service.

Prior to locating in Pikeville in 1950, he received surgical training at Veterans Administration Hospitals in Louisville and Fayetteville, N. C. He moved to Hazard in 1955.

COUNCILORS

First District



J. VERNON PACE
Poducoh

Second District



WALTER O'NAN*
Henderson

Third District



RALPH D. LYNN
Elkton

Fourth District



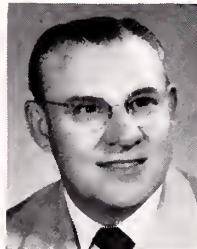
W. KEITH CRUME
Bordstown

Fifth District



CARLISLE MORSE*
Louisville

Sixth District



L. O. TOOMEY*
Bowling Green

Seventh District



B. B. BAUGHMAN
Frankfort

Eighth District



NORMAN ADAIR
Covington

Ninth District



J. M. STEVENSON
Brooksville

Tenth District



J. F. VAN METER
Lexington

Eleventh District



HUGH MAHAFFEY**
Richmond

Twelfth District



GARNETT J. SWEENEY
Liberty

Thirteenth District



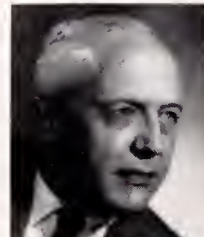
CHARLES B. JOHNSON
Russell

Fourteenth District



CHARLES C. RUTLEDGE
Hozord

Fifteenth District



CHARLES B. STACY
Pineville

* Member, Executive Committee

• Chairmen

Doctor Rutledge is from a medical family. His father is John H. Rutledge, M.D., of Richmond and his brother, Harold H. Rutledge, M.D., was a practicing physician there before his death in 1953.

Medical organizations to which Doctor Rutledge belongs include the Kentucky Chapter, American College of Surgeons, and the Kentucky Surgical Society.

Reference Committee Members Named by Speaker Sparks

Seven reference committees will be in operation at the 1957 Annual Session to expedite the business of the House, according to Clyde D. Sparks, M.D., Ashland, speaker of the House of Delegates.

The 1957 committees will meet in the same room at the Columbia Auditorium and at the same time as in past years, Doctor Sparks said.

He outlined the duties of the committee as follows:

1. The reports of the officers, council and KSMA committees and agencies which are made to the House of Delegates will be referred to one of the seven reference committees at the first meeting of the House the evening of September 16.

2. The members of the reference committees will meet in the reference committee room at the Columbia Auditorium at 1:45 p.m. Tuesday for a short briefing period before going into session at 2:00 p.m.

3. The Committees will hold hearings for at least one hour (or as long as necessary). During this period, any member of KSMA who wants to be heard on one or more issues before the House is urged to be present and make his views known. Doctor Sparks said if the member did not know where to go to be heard, he should contact him, any KSMA officer or member of the Headquarters staff.

4. The reference committees will go into executive session following the hearings. During this session, the committees will re-study the reports, review the testimony heard, and decide on recommendations on the reports assigned them.

5. The final duty of the Committee is to present the recommendations on the reports at the final meeting of the Delegates, Wednesday evening, September 18.

Following are the names of the delegates appointed by Dr. Sparks who will make up the reference committees and the names of those

who will serve on the credentials committee, as well as those who make up the alternate committee list.

REFERENCE COMMITTEE NUMBER 1—

Reports of Officers and Councilors

Rankin Blount, M.D., Lexington, Chairman
H. E. Martin, M.D., Ashland, Vice-Chairman
W. C. Hambley, M.D., Pikeville
Loman Trover, M.D., Madisonville
Rudy Vogt, M.D., Louisville

REFERENCE COMMITTEE NUMBER 2—

Reports on Medical Care, Medical Education, Hospitals and Related Subjects

Richard G. Elliott, M.D., Lexington, Chairman
Chris Jackson, M.D., Danville, Vice-Chairman
Clifton G. Follis, M.D., Glasgow
John D. Handley, M.D., Hodgenville
Marc J. Reardon, M.D., Covington

REFERENCE COMMITTEE NUMBER 3—

Reports on Legislation and Public Relations

Thomas Gilbert, M.D., Bowling Green, Chairman
Carl Fortune, M.D., Lexington, Vice-Chairman
A. B. Colley, M.D., Owensboro
John F. Greene, M.D., Sandy Hook
James Miller, M.D., Greensburg

REFERENCE COMMITTEE NUMBER 4—

Reports on Miscellaneous Business

T. O. Meredith, M.D., Harrodsburg, Chairman
J. L. Becknell, M.D., Manchester, Vice-Chairman
W. P. Clifton, M.D., Barbourville
E. S. Dunham, M.D., Edmonton
Robert S. Dyer, M.D., Louisville

REFERENCE COMMITTEE NUMBER 5—

Reports on Miscellaneous Business

Roy Moore, M.D., Louisville, Chairman
H. G. Wells, M.D., Georgetown, Vice-Chairman
Glen Bryant, M.D., Louisville
Conrad Jones, M.D., Murray
Alec Spencer, M.D., West Liberty

REFERENCE COMMITTEE NUMBER 6—

Reports on Miscellaneous Business

Carl Pigman, M.D., Whitesburg, Chairman
Blain Lewis, M.D., Louisville, Vice-Chairman
David Asher, M.D., Pineville
W. G. Edds, M.D., Calhoun
Douglas Jenkins, M.D., Richmond

REFERENCE COMMITTEE NUMBER 7—

Reports on Miscellaneous Business

L. F. Beasley, M.D., Franklin, Chairman
Carl Cooper, M.D., Bedford, Vice-Chairman
Paul Side, M.D., Lancaster

H. E. Titsworth, M.D., Clinton
Claude C. Waldrop, M.D., Williamstown

CREDENTIALS COMMITTEE

S. G. Marcum, M.D., Irvine, Chairman
Reeves Morgan, M.D., Mayfield
W. P. McKee, M.D., Eminence

ALTERNATE COMMITTEE MEMBERS

N. L. Bosworth, M.D., Lexington
McHenry Brewer, M.D., Louisville
Foster Coleman, M.D., Louisville
Walter Johnson, M.D., Paducah
M. D. Klein, M.D., Shelbyville
Carl Kumpe, M.D., Ft. Mitchell
Joe Miller, M.D., Benton
C. G. Prindle, M.D., Maysville
B. F. Reynolds, M.D., Carlisle
Gladys L. Rouse, M.D., Florence
Jesse Smith, M.D., Paris

Nominating Committee to Meet on Monday Evening

Immediately following the close of the first session of the House of Delegates at the Columbia Auditorium, Monday evening, September 16, any KSMA member wishing to confer with the nominating committee for General KSMA Officers for 1957-58 will have the opportunity to do so, according to Coleman C. Johnston, M.D., Lexington, chairman of the committee.

Procedures for the operation of the committee, as set forth in the By-laws, will be carefully followed, Doctor Johnston said. Location of the nominating committee's second session will be announced at the close of the first meeting. All members interested in the work of the nominating committee were urged to appear at that time.

Recommendations of the nominating committee will be presented at 3:30 p.m., Tuesday, in the Auditorium just prior to the beginning of the second scientific session, as called for in the By-laws. Nominees for each office will be announced at this time.

General election of officers will be held on Wednesday evening, September 18, near the close of the final session of the House. Recommendations of the nominating committee will be read again. By-laws provide that other nominations may be made from the floor "without discussion or comment."

Other members of the nominating committee are: Virgil G. Kinnaird, M.D., Lancaster; John

S. Llewellyn, M.D., Louisville; Alfred O. Miller, M.D., Louisville; and Carlisle Morse, M.D., Louisville.

House to Elect Councilors At Sept. 18 Session

The KSMA House of Delegates will elect councilors for five of the 15 Councilor Districts at its second and final session at the Columbia Auditorium Wednesday night, September 18, announces Hugh Mahaffey, M.D., Richmond, chairman of the Council.

Councilors are elected for a term of three years and "shall be limited to serving not more than two consecutive terms," according to Section I, Chapter V, of the By-laws.

The five districts that will elect Councilors and the incumbents are:

Fifth District—Carlisle Morse, M.D., Louisville. Elected in September, 1955, to fill the unexpired term of Richard R. Slucher, M.D., Buechel, present KSMA president.

Sixth District—L. O. Toomey, M.D., Bowling Green. Has served two full three-year terms.

Eighth District—Norman Adair, M.D., Covington. Elected in September, 1956, to fill the unexpired term of E. B. Mersch, M.D., Covington, present KSMA president-elect.

Eleventh District—Hugh Mahaffey, M.D., Richmond. Has served two full three-year terms.

Fifteenth District—Charles B. Stacy, M.D., Pineville. Has served one three-year term.

The method of selecting nominees for the office of district councilor as set forth in the By-laws is:

"The Delegates from the counties in each Councilor District shall form the Nominating Committee for the purpose of nominating Councilor for the Councilor District concerned. This committee shall hold a meeting open to all active members of Councilor District concerned who are in attendance at the meeting for the purpose of discussing the nomination for the Councilor to serve the District. Additional nominations may be made from the floor by any member of the House of Delegates when the Nominating Committee makes its report to the House of Delegates."

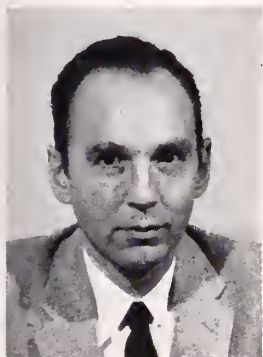
The Speaker of the House will announce, at the close of the first session of the House, the location of the meetings for the delegates of each district who will nominate a councilor.

Guest Speakers

GARNER MIDDLEBROOK, M.D.*

Denver, Colorado

"Tuberculosis in Childhood: Some Aspects of Prevention, Diagnosis and Treatment" will be discussed by Doctor Middlebrook, associate professor of microbiology, University of Colorado School of Medicine, at the general session on Tuesday, September 17 at 10:30 a.m.



He will be guest speaker at the specialty group session of the Kentucky Chapter,

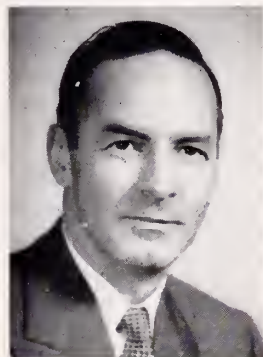
American Academy of Pediatrics on Wednesday, discussing "Problems of Tuberculosis in Children" at 1:45 p.m. and "Pathogenesis and Treatment of Mucoviscidosis and the Accompanying Increase in Susceptibility to Pulmonary Infections" at 3:30 p.m.

A graduate of Harvard Medical School in 1944, Doctor Middlebrook won the Pasteur Medal of the Institute Pasteur, Paris, in 1954. He is a member of the Massachusetts Medical Society, the Society for Experimental Biology and Medicine and the Western Association of Physicians, and has been associated with the Rockefeller Institute for Medical Research.

LAWRENCE C. KOLB, M.D.*

New York City, New York

Director of the New York State Psychiatric Institute, Doctor Kolb, guest speaker of the Kentucky Psychiatric Society, will discuss "Pain as an Emotional Problem" before the general session at 11:30 a.m. Tuesday, September 17.



"Psychotherapeutic Evolution and its Implications" will be the subject of his talk before the specialty group on Wednesday

at 3:30 p.m. A graduate of Johns Hopkins in

1934, Doctor Kolb is professor of psychiatry at the College of Physicians and Surgeons, Columbia University.

He served as consultant in psychiatry at the Mayo Clinic and as director of research projects for the Mental Hygiene Division of the U. S. Public Health Service. Certified in psychiatry and neurology in 1941, he is a fellow of the American Neurological Association and the American Psychiatric Association.

RALPH A. REIS, M.D.*

Chicago, Illinois

Doctor Reis, professor of obstetrics and gynecology at Northwestern University, will discuss "Obstetrical Anesthesia and Analgesia" at the general session at 10:50 a.m., Tuesday, September 17.

Author of 80 articles on obstetrics and gynecology, Doctor Reis will talk on "A Reevaluation of Endocrine Therapy" at the group session of the Kentucky Obstetrical and Gynecologic Society on Wednesday, September 18, at 1:45 p.m.



A graduate of Northwestern University Medical School in 1919, he is senior attending physician and gynecologist at Michael Reese Hospital in Chicago. He is a Fellow and past president of the Chicago Gynecological Society, and the Central Association of Obstetricians and Gynecologists, and Fellow and past secretary of the American College of Obstetricians and Gynecologists.

JAMES E. SKAGGS, D.M.D.

Louisville, Kentucky

"Oral Pathology and the Physician" is the title of the paper to be presented by Doctor

*Indicates that the speaker in addition to addressing one of the General Scientific Sessions of the KSMA Annual Meeting is also scheduled to speak before one of the Specialty Groups on Wednesday afternoon.



Skaggs, guest speaker from the dental profession, who will speak at the general session on Tuesday, September 17 at 3:50 p.m.

A native Kentuckian, Doctor Skaggs was born in Clarkson in 1918 and attended the University of Louisville Dental School, graduating in

1943. He interned and completed his residency in oral surgery at Cincinnati General Hospital.

Doctor Skaggs is a diplomate of the American Board of Oral Surgery, a member of the American Society of Oral Surgery and the Southeastern Society of Oral Surgeons. He is on the visiting staff of the Department of Oral Surgery, University of Louisville Dental School and Louisville General Hospital.

DONALD M. SHAFER, M.D.*

New York, New York

Subject of Doctor Shafer's talk before the general session on Tuesday, September 17, at 4:10 p.m. is "The

Role and Function of the National Eye Bank." He is the guest of the Kentucky Eye, Ear, Nose and Throat Society.



Doctor Shafer, surgeon director of the Manhattan Eye, Ear, and Throat Hospital and director of the Eye Bank for Sight

Restoration, will discuss "Vitreous Implant for Retinal Detachment" at the group session at 1:45 p.m. on Wednesday, September 18.

A graduate of Cornell Medical School in 1936, Doctor Shafer is also attending ophthalmologist at the U. S. Naval Hospital, St. Albans, and consulting ophthalmologist at the Vassar Hospital, Poughkeepsie.

JOHN M. RUMBALL, M.D.*

Coral Gables, Florida

Doctor Rumball, guest speaker of the Kentucky Chapter, American College of Physicians,



will discuss "Modern Concepts in the Management of Hepatic Failure" at the general session, Tuesday September 17, at 4 p.m.

Subject of his talk before the specialty group at 2:15 p.m. on Wednesday, September 18, will be "The Behavior of Serum

Iron in Hepatitis." He is chief of the medical service at the Veterans Administration Hospital, Coral Gables Florida, clinical associate professor of medicine at the University of Miami School of Medicine, and author of many publications.

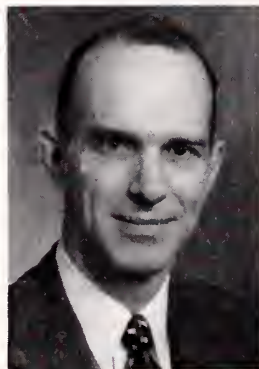
A graduate of the University of Minnesota School of Medicine in 1935, Doctor Rumball is a fellow of the American Gastroscopic Society and the American Gastroenterological Association.

WILLIAM R. WILLARD, M.D.*

Lexington, Kentucky

"The Medical Center and Practicing Physicians" is the subject to be discussed by Doctor

Willard, dean of the University of Kentucky Medical School and vice president of the new medical center, at the general session on Tuesday, September 17 at 4:30 p.m.



Doctor Willard will talk on "The Medical Center and the Future of Our Public Health

in Kentucky" at the group session of the Kentucky Public Health Physicians Wednesday at 3:30 p.m.

A graduate of Yale with an M.D. degree in 1934, Doctor Willard received the degree of Doctor of Public Health from the school in 1937. Before his appointment to the University of Kentucky, he served five years as dean of Syracuse College of Medicine, State University of New York.

ALTON OCHSNER, M.D.*
New Orleans, Louisiana

"Carcinoma of the Stomach" is the topic to be discussed by Doctor Ochsner, director of surgery at the Ochsner, Clinic and Foundation Hospital and president of the Ochsner Medical Foundation, at the general session on Thursday, September 19, at 10:30 a.m.



Guest of the Academy of General Practice, Doctor Ochsner will speak on "Differential Lesions of the Chest and Their Diagnosis" at the special session Wednesday at 4:00 p.m., and will be the moderator in Thursday's panel.

Professor of surgery at Tulane University's School of Medicine, he is president of the Cordell Hull Foundation for International Education and past president of the American College of Surgeons.

RICHARD H. CHAMBERLAIN, M.D.*
Philadelphia, Pennsylvania

A graduate of the University of Louisville School of Medicine in 1939, Doctor Chamberlain's topic at the group session of the Kentucky Radiological Society, Wednesday, September 18, at 1:45 p.m., will be "Radiation Protection and the Genetic Future of the Population."



Doctor Chamberlain, professor of radiology at the University of Pennsylvania School of Medicine and Graduate School, received his fellowship in radiology at the University of Pennsylvania after interning at Louisville City Hospital.

He is a consultant in radiology for the U. S. Public Health Service and the National Cancer Institute and a fellow of the American College of Radiology. Doctor Chamberlain will serve on the panel at the general session, Thursday, September 19, at 3:30 p.m.

ROBERT A. KNIGHT, M.D.*
Memphis, Tennessee

"Preventable Errors in the Care of Orthopedic Injuries" is the topic which Doctor Knight, medical director of Les Passes Cerebral Palsy Treatment Center and staff member of the Campbell Clinic, Memphis, will discuss at the general session on Thursday at 11:10 a.m. At the group session of the Kentucky Orthopedic Society at 3:30 p.m. on Wednesday, his topic will be "Reconstructive Surgery of the Hip."



He received his M.D. from the University of Oklahoma in 1938, and an M. S. in orthopedic surgery from the University of Tennessee in 1948. Doctor Knight now serves as assistant professor of orthopedic surgery at the University of Tennessee.

A fellow of the American College of Surgeons, a member of the Southern Medical Association, the Academy of Orthopedic Surgery, he is also on the American Board of Associate Editors of the Journal of Bone and Joint Surgery.

STUART C. CULLEN, M.D.*
Iowa City, Iowa

Doctor Cullen, chairman of the division of anesthesiology at the State University of Iowa, will speak on "Changing Concepts in the Practice of Anesthesia" at the group session of the Kentucky Chapter of the Anesthesiology Society at 3:30 p.m.



The author of nearly 80 publications on anesthesiology, Doctor Cullen will participate in the panel discussion planned as a highlight of the general session on Thursday, September 19 at 3:30 p.m.

He received his M.D. from the University of Wisconsin in 1933 and was certified in anesthesiology in 1939. Doctor Cullen is a member of the American Society of Anesthetists and the Society for Experimental Biology and Medicine.

GEORGE CRILE, JR., M.D.
Cleveland, Ohio

Doctor Crile, guest of the Kentucky Chapter, American College of Surgeons, will be a member of the panel featured at the afternoon session on Thursday, September 19.



A graduate of Harvard Medical School in 1933, Doctor Crile is head of the department of general surgery at the Cleveland Clinic Foundation, which he has served

as a staff member since 1937.

A fellow of the American College of Surgeons, a member of the American Surgical Society, and the American Goiter Association, he has spoken in Kentucky on numerous occasions and is well received as a speaker here.

WILLIAM McK. JEFFERIES, M.D.
Cleveland, Ohio

Doctor Jefferies, physician-in-charge of the endocrine section, University Hospitals, and assistant professor of medicine at Western Reserve University, will participate in the panel at the general session, Thursday, September 19 at 3:30 p.m.



The recipient of the Van Meter Award for thyroid research in 1949, Doctor Jefferies graduated from the University of Virginia Medical School in 1940. He was a research fellow in medicine at Harvard Medical School and Massachusetts General Hospital in the endocrine and thyroid clinics.

He is a member of the American Goiter Association, the American Association for the Advancement of Science, and the American Federation for Clinical Research.

Panel Discussion Highlights
'57 Scientific Program

"Hypothyroidism—Diagnosis and Management" is the title of a panel that will be one of the top features of the Scientific Program of the 1957 Annual Meeting on Thursday afternoon, September 19, at 3:30 p.m.

The star-studded panel will present Alton Ochsner, M.D., New Orleans, as moderator. George Crile, M.D., of the Cleveland Clinic, will be the surgical member. Stuart C. Cullen, M.D., Iowa City, will handle the anesthesiology discussion and Richard H. Chamberlain, M.D., Philadelphia, radiology. William McK. Jefferies, M.D., Cleveland, will represent the internists, while Harold Gordon, M.D., Louisville, will present the pathology discussion.

Interest in this presentation is running unusually high, according to Richard R. Slucher, M.D., Buechel, chairman of the committee on Scientific Assembly and Arrangements. Doctor Slucher said, "The subject itself is excellent, and the high calibre of the participants and the personalities involved make this panel a must on your Annual Meeting agenda."

The Louisville representative, Doctor Gordon is professor of pathology at the University of Louisville and chief of laboratory services at the Veterans Administration Hospital in Louisville.



Currently medical director of the clinical laboratory of St. Mary and Elizabeth Hospital and consultant in pathology at Kosair Crippled Children's Hospital, he received his M.D. degree from the University of Toronto, Canada and received graduate training at the University of Michigan.

He joined the staff of the University of Louisville in 1935, and in 1946 was appointed to the staff of the Veterans Administration Hospital.

GP's To Receive Credit

The 1957 scientific program, described by some observers as being among the very best in recent years, will be recognized for credit by members of the Kentucky Academy of General Practice. The entire program will, of course, be accepted in category II. As the Journal went to

press, it was expected that the eight and one-half hours of closed circuit color TV programs, developed and presented in their entirety by the faculty of the University of Louisville School of Medicine, will qualify for Category I credit in the Academy.

ANNUAL MEETING PROGRAM SUMMARY

THE KENTUCKY STATE MEDICAL ASSOCIATION

SEPTEMBER 16, 17, 18, 19, 1957

LOUISVILLE

MONDAY, SEPTEMBER 16

12:00 noon	Council Meeting	Louis XVI Room, Brown Hotel
6:00 P. M.	Registration of House of Delegates	Columbia Auditorium
7:00 P. M.	First Meeting of House of Delegates	Columbia Auditorium

TUESDAY, SEPTEMBER 17

7:45 A. M.	Registration	Columbia Auditorium
8:15 A. M.	Opening Ceremonies	Columbia Auditorium
8:30 A. M.	First Scientific Session	Columbia Auditorium
	Color Television, 8:30 to 10:00	
	Scientific Papers, 10:30 to 11:30	
11:10 A. M.	President's Address	Columbia Auditorium
1:30 P. M.	Second Scientific Session	Columbia Auditorium
	Color Television, 1:30 to 3:00	
	Scientific Papers, 3:50 to 4:50	
2:00 P. M.	Reference Committee Meetings	Columbia Auditorium

WEDNESDAY, SEPTEMBER 18

8:30 A. M.	Third Scientific Session	
	Color Television 8:30 to 11:30	
11:50 A. M.	President's Luncheon for Distinguished Guests	Roof Garden, Brown Hotel
1:45 P. M.	Specialty Group Sessions (12 specialty group scientific programs will be held simultaneously. Any KSMA member may attend any of these meetings)	
5:00 P. M.	Council Dinner	Louis XVI Room, Brown Hotel
6:00 P. M.	Registration, House of Delegates	Columbia Auditorium
7:00 P. M.	Second Meeting, House of Delegates	Columbia Auditorium

THURSDAY, SEPTEMBER 19

8:30 A. M.	Fourth Scientific Session	Columbia Auditorium
	Color Television, 8:30 to 10:00	
	Scientific Papers, 10:30 to 11:50	
11:30 A. M.	Inaugural Ceremony, Presentation of Awards	Columbia Auditorium
11:50 A. M.	Council Luncheon	Parlors A, B, C, Brown Hotel
1:30 P. M.	Fifth Scientific Session	Columbia Auditorium
	Color Television, 1:30 to 3:00	
	Panel, 3:30 to 5:00	
5:00 P. M.	Adjournment	

A 30-minute intermission has been scheduled during each morning and afternoon Scientific Session for visiting the Scientific and Technical Exhibits.

SCIENTIFIC PROGRAM

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THE R. W. GAINES MEMORIAL MEETING

COLUMBIA AUDITORIUM

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THE KENTUCKY STATE MEDICAL ASSOCIATION

TUESDAY, SEPTEMBER 17

COLUMBIA AUDITORIUM

Registration

7:45

- 8:15 Opening of General Session
Call to Order by the President
Richard R. Slucher, M.D., Buechel
Invocation
Paul S. Stauffer, D.D., Louisville, First
Christian Church
Welcoming Remarks
John S. Harter, M.D., Louisville, President,
Jefferson County Medical Society
Announcements
Edward B. Mersch, M.D., Covington, KSMA
President-elect

FIRST SCIENTIFIC SESSION

8:30 A. M.

Richard R. Slucher, M.D., Buechel, KSMA President,
presiding

COLOR TELEVISION

- 8:30 Introduction
Rudolf J. Noer, M.D., Louisville
8:40 Common Skin Lesions
A. B. Loveman, M.D., Louisville
9:00 Prostatism
Robert Lich, Jr., M.D., Louisville
9:30 Hemorrhoids, Diagnosis and Treatment
William J. Martin, Jr., M.D.
10:00 Visit Exhibits

SCIENTIFIC PAPERS

- 10:30 Tuberculosis in Childhood: Some Aspects of Pre-
vention, Diagnosis and Treatment
Gardner Middlebrook, M.D., Denver, Colo-
rado
10:50 Obstetrical Anesthesia and Analgesia
Ralph Reis, M.D., Chicago, Illinois
11:10 President's Address
11:30 Pain as an Emotional Problem
Lawrence C. Kolb, M.D., New York City,
New York
11:50 Lunch

SECOND SCIENTIFIC SESSION

1:30 P. M.

Karl D. Winter, M.D., Louisville, Vice President,
(Central), presiding

COLOR TELEVISION

- 1:30 Acute Eye Emergencies
C. Dwight Townes, M.D., Louisville
1:50 Neurologic Diagnosis
Ephraim Roseman, M.D., Louisville
2:10 Cardiac Emergencies
Walter S. Coe, M.D., Louisville
Maurice M. Best, M.D., Louisville
2:30 Psychiatric Interview
William K. Keller, M.D., Louisville
3:00 Visit Exhibits

SCIENTIFIC PAPERS

- 3:50 Oral Pathology and the Physician
James Skaggs, D.M.D., Louisville
4:10 The Role and Function of the National Eye Bank
Donald M. Shafer, M.D., New York City,
New York
4:30 Modern Concepts in the Management of Hepatic
Failure
John M. Rumball, M.D., Coral Gables,
Florida

WEDNESDAY, SEPTEMBER 18

Columbia Auditorium

THIRD SCIENTIFIC SESSION

8:30 A. M.

Carl Norfleet, M.D., Somerset, Vice President (East-
ern), presiding

COLOR TELEVISION

- Symposium on Duodenal Ulcer
8:30 Introduction and Statement of Problem
Beverly T. Towery, M.D., Louisville
8:40 Presentation of Case (for operation)
Residents from Service
8:50 The Diagnostic Problem in Duodenal Ulcer
Arthur M. Schoen, M.D., Louisville
9:10 X-Ray Diagnosis
Everett L. Pirkey, M.D., Louisville
9:20 Operative Findings Shown in O. R.
James C. Drye, M.D., Louisville
9:40 Pathology
William M. Christophersen, M.D., Louisville
10:00 Visit Exhibits
10:30 Operative Views in Completed Operation
James C. Drye, M.D., Louisville
10:40 The Therapeutic Problem Non-Operative Treatment
Malcolm Stanley, M.D.
11:00 Present Day Concepts in Surgery
Rudolf J. Noer, M.D., Louisville
11:15 Summary and Closing Remarks
Beverly T. Towery, M.D., Louisville

PRESIDENT'S LUNCHEON

ROOF GARDEN—BROWN HOTEL

11:50 A. M.

Richard R. Slucher, M.D., Buechel, President of
KSMA, presiding

Invocation

J. W. Averitt, D.D., Louisville, Christ Metho-
dist Church

Recognitions

Richard R. Slucher, M.D.

"Ropes of Gold"

Dr. Kenneth McFarland, Topeka, Kansas
Nationally known educator and lecturer

Explanation of Wednesday Afternoon Program

Twelve specialty groups will present scientific pro-
grams simultaneously on Wednesday afternoon and
there will be no general session. Programs will be held

in the Columbia Auditorium, the First Christian Church, the Calvary Episcopal Church and the First Unitarian Church. These twelve group meetings will start at 1:45 p.m. A 45 minute intermission to visit the exhibits has been scheduled, starting at 2:45 p. m. At 3:30 p. m. the twelve groups will again go into session for the final portion of their programs. KSMA members are free to move from one group to another during these sessions.

Kentucky Society of Anesthesiologists

- 1:45 Viadril as a Supplementation with Spinal Anesthesia
Warren H. Ash, M.D., Louisville
- 2:15 Hemorrhagic States Following Multiple Blood Transfusions
Thomas Stevenson, M.D., Louisville
- 2:45 Visit Exhibits
- 3:30 Changing Concepts in the Practice of Anesthesia
Stuart C. Cullen, M.D., Iowa City, Iowa

Kentucky Chapter, American College of Chest Physicians

- 1:45 The Fractured Sternum and Alternative Plans for Stabilization
John B. Floyd, Jr., M.D., Lexington
- 2:15 The Harm Done by Erroneous Diagnosis of Heart Disease
McLeod Patterson, M.D., Somerset
- 2:45 Visit Exhibits
- 3:30 Kentucky's Tuberculosis
Adam Miller, M.D., Lexington
- 4:00 Conservative Management of Post-Operative Surgical Complications in Pulmonary Tuberculosis
Nathan Levene, M.D., Louisville

Kentucky Eye, Ear, Nose and Throat Society

- 1:45 Vitreous Implant for Retinal Detachment
Donald M. Shafer, M.D., New York, New York
- 2:15 The Role of the Otorhinolaryngologist in Acute Trauma
Raymond E. Jones, M.D., Louisville
- 2:45 Visit Exhibits
- 3:30 Surgery of the Neck
F. Johnson Putney, M.D., Philadelphia, Pennsylvania
- 4:00 Role of the Ophthalmologist in Acute Trauma
Robert Dockery, M.D., Louisville

Kentucky Chapter, American Academy of General Practice

- 1:45 Fluid and Electrolyte Balance in Infant Diarrhea
James L. Dennis, M.D., Oakland, California
- 2:15 Pitfalls in the Roentgen Diagnosis of Gall Bladder Disease
John R. Smith, M.D., Louisville
- 2:45 Visit Exhibits
- 3:30 The Symptomatic Treatment of Allergic Dermatoses
Maurice Kaufmann, M.D., Lexington
- 4:00 Differential Lesions of the Chest and their Diagnosis
Alton Ochsner, M.D., New Orleans, Louisiana

Kentucky Obstetrical and Gynecologic Society

- 1:45 A Reevaluation of the Endocrine Therapy
Ralph Reis, M.D., Chicago, Illinois
- 2:15 Practical Applications with Common Sense Approach in Obstetrics
George Green, M.D., Lexington
- 2:45 Visit Exhibits

- 3:30 Symposium on Obstetric Difficulties
Ralph Reis, M.D., Chicago, Illinois
Silas Starr, M.D., Louisville
Rudy Vogt, M.D., Louisville

Kentucky Orthopedic Society

- 1:45 Eosinophilic Granuloma of Bone
K. Armand Fischer, M.D., Louisville
- 2:15 Degenerative Intervertebral Lesions Treated by Combined Inter-body Fusion
W. K. Massie, M.D., Lexington
- 2:45 Visit Exhibits
- 3:30 Reconstructive Surgery of the Hip
Robert A. Knight, M.D., Memphis, Tennessee
- 4:00 To be announced

Kentucky Chapter, American Academy of Pediatrics

- 1:45 Problems of Tuberculosis in Children
Gardner Middlebrook, M.D., Denver, Colorado
- 2:45 Visit Exhibits
- 3:30 Pathogenesis and Treatment of Mucoviscidosis and the Accompanying Increase in Susceptibility to Pulmonary Infections
Gardner Middlebrook, M.D., Denver, Colorado

Kentucky Chapter, American College of Physicians

- 1:45 Clinical Significance of Hiatal Hernia
J. H. Willard, M.D., Harlan
- 2:15 The Behavior of Serum Iron in Hepatitis
John M. Rumball, M.D., Coral Gables, Florida
- 2:45 Visit Exhibits
- 3:30 The Contributing Causes of Angina
Allen L. Cornish, M.D., Lexington
- 4:00 Complications of Hypoglycemia
Robert S. Tillett, M.D., Louisville

Kentucky Psychiatric Association

- 1:45 Reactive and Retroactive Rebellion
Edmond F. Erwin, Ph.D., Louisville
- 2:15 The Ups and Downs and Achievements of Five Years as a Mental Hospital Administrator
Ott B. McAtee, M.D., Madison, Indiana
- 2:45 Visit Exhibits
- 3:30 Psychotherapeutic Evolution and Its Implications
Lawrence C. Kolb, M.D., New York City, New York

Kentucky Public Health Physicians

- 1:45 An Approach to Health Problems in Kentucky
Richardson K. Noback, M.D., Lexington
- 2:15 The Physician and His Relationship to the Health Department and Health Program
Daryl P. Harvey, M.D., Glasgow
- 2:45 Visit Exhibits
- 3:30 The Medical Center and the Future of Our Public Health in Kentucky
William R. Willard, M.D., Lexington
- 4:00 Business Session

Kentucky Radiological Society

- 1:45 Radiation Protection and the Genetic Future of the Population
Richard T. Chamberlain, M.D., Philadelphia, Pennsylvania
- 2:15 Abdominal and Peripheral Arteriography
H. L. Townsend, M.D., Louisville
- 2:45 Visit Exhibits
- 3:30 Experience with a 1000 Curie Cobalt Source
Patrick J. Cavanaugh, M.D., Louisville
- 4:00 High Voltage Diagnostic Techniques
John Berry, M.D., Lexington
Robert Shepard, M.D., Lexington

Kentucky Chapter, American College of Surgeons

- 1:45 **Conservation of Renal Tissue in Surgery for Calcareous Disease**
W. Vinson Pierce, M.D., Covington
- 2:15 **Surgical Therapy of Gall Bladder Disease**
Henry S. Collier, M.D., Louisville
- 2:45 **Visit Exhibits**
- 3:30 **Mesenteric Thrombosis**
R. W. Robertson, M.D., Paducah
- 4:00 **Sarcoma of the Gastrointestinal Tract**
Coleman C. Johnston, M.D., Lexington

THURSDAY, SEPTEMBER 19 FOURTH SCIENTIFIC SESSION

8:30 A. M.

Charles R. Yancey, M.D., Hopkinsville, Vice President (Western), presiding

COLOR TELEVISION

- Tuberculosis—Still a Major Problem
Symposium, led by Oscar O. Miller, M.D.
- 8:30 **Fifty Years of Tuberculosis: Changing Concepts in Diagnosis**
Oscar O. Miller, M.D., Louisville
- 8:45 **Radiologic Diagnosis**
Alfred O. Miller, M.D., Louisville
- 9:00 **Diagnostic Laboratory Procedures**
A. B. Mullen, M.D., Louisville
- 9:10 **Childhood Tuberculosis and its Implications**
W. C. Adams, M.D., Louisville
- 9:25 **Anti-tuberculosis Therapy**
Daniel N. Pickar, M.D., Louisville
- 9:40 **Surgical Treatment**
Herbert T. Ransdell, Jr., M.D., Louisville
- 9:55 **Summary**
Oscar O. Miller, M.D.

SCIENTIFIC PAPERS

- 10:30 **Carcinoma of the Stomach**
Alton Ochsner, M.D., New Orleans, Louisiana
- 10:50 **The Medical Center and the Practicing Physician**
William R. Willard, M.D., Lexington
- 11:10 **Preventable Errors in the Care of Orthopedic Injuries**
Robert A. Knight, M.D., Memphis, Tennessee
- 11:30 **Presentation of Awards**
Woodford B. Troutman, M.D., Louisville
- Inaugural Ceremonies**
Hugh Mahaffey, M.D., Richmond, Chairman of the Council
- Presentation of the Past President's Key**
Edward B. Mersch, M.D., Covington
- Lunch**

FIFTH SCIENTIFIC SESSION

Edward B. Mersch, M.D., Covington, newly installed president, presiding

1:30 P. M.

COLOR TELEVISION

- 1:30 **Addison's Disease (Case)**
Beverly T. Towery, M.D., Louisville
- 1:50 **Lesions of the Uterine Cervix**
Douglas M. Haynes, M.D., Louisville
- 2:10 **Congenital Heart Disease (Symposium)**
Alex J. Steigman, M.D., Louisville
Joseph A. Little, M.D., Louisville
Lawrence A. Davis, M.D., Louisville
Hugh B. Lynn, M.D., Louisville
Leonard Leight, M.D., Louisville
- 3:00 **Visit Exhibits**

PANEL DISCUSSION

3:30 P. M.

- 3:30 **Panel—"Hypothyroidism—Diagnosis and Management"**
Alton Ochsner, M. D., New Orleans, Moderator
Richard H. Chamberlain, M.D., Philadelphia, radiology
George Crile, M.D., Cleveland, surgery
Stuart C. Cullen, M.D., Iowa City, anesthesiology
Harold Gordon, M.D., Louisville, pathology
William McK. Jefferies, M.D., Cleveland, internist

THIRTY-FIFTH ANNUAL MEETING

of the

WOMAN'S AUXILIARY

to the

KENTUCKY STATE MEDICAL ASSOCIATION

BROWN HOTEL

Louisville, Kentucky

September 17, 18, 19, 1957

REGISTRATION:

North Bay of Lobby, Brown Hotel

Monday—12 noon to 5 p.m.

Tuesday—9 a.m. to 5 p.m.

Wednesday—9 a.m. to 11 a.m.

Chairman of Registration:

Mrs. Guy Morford, Owensboro

Chairman of Hospitality:

Mrs. James Ryan, Louisville

Hospitality Room open:

Tuesday—10 a.m. to 5 p.m.

Wednesday—9 a.m. to 1 p.m.

Tuesday, SEPTEMBER 17

9:00 A. M.

Parlor A

Pre-convention Board Breakfast (subscription). The Board consists of all general state officers, councilors, state committee chairmen, county auxiliary presidents and three immediate past presidents.

10:30 A. M.

South Room

Formal opening of the Thirty-Fifth Annual Meeting of the Woman's Auxiliary to the Kentucky State Medical Association.

Presiding Mrs. Charles B. Stacy,
Pineville, President

Invocation Mrs. William Wainer,
Providence, Councilor, District 2

Pledge of Allegiance to the Flag .. Mrs. Clark Bailey,
Harlan, State Chairman of Rural Health,
Immediate Past Second Vice-President
AMA Auxiliary

"I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one Nation, under God, indivisible, with Liberty and Justice for all."

Pledge of LoyaltyMrs. Clark Bailey
"I pledge my loyalty and devotion to the Woman's Auxiliary to the American Medical Association. I will support its activities, protect its reputation and ever sustain its high ideals."

Address of Welcome

Mrs. J. Murray Kinsman, Louisville,
President Jefferson County Auxiliary

ResponseMrs. Daniel Bower,
Williamsburg, Councilor District 15

In MemoriamMrs. R. Ward Bushart,
Fulton, Immediate Past President

Presentation of Convention Chairman

Mrs. Houston Shaw, Louisville

Presentation of Distinguished Guests

Roll CallMrs. J. O. Mattax,
Carrollton, Secretary

Minutes of the Thirty-Fourth Annual Meeting

Mrs. J. O. Mattax

Report of the 1957 National Convention

Mrs. Merle M. Mahr,
Madisonville, State Tuberculosis Chairman

Report of the Councilor of the Woman's Auxiliary to the Southern Medical Association

Mrs. W. R. Moore,
Louisville, Councilor from Kentucky

REPORTS OF OFFICERS:

TreasurerMrs. B. T. Harris,
Lexington

President-Elect and Organization Chairman

Mrs. J. Andrew Bowen,
Louisville

PresidentMrs. Charles B. Stacy,
Pineville

Old Business

New Business

Report of the Nominating Committee

Mrs. R. Ward Bushart,
Chairman

Election of Nominating Committee, 1957-58

Presentation of 1957-58 Budget

Mrs. J. Murraray Kinsman,
Chairman of Finance

Report of RegistrationMrs. Guy Morford

Reports of State Chairmen

12:30 P. M.

South Room

Subscription Luncheon

Informal Round Table Discussions on County Projects during Luncheon

Luncheon in honor of

Mrs. O. W. Robinson, Paris, Tennessee

President Woman's Auxiliary to the Southern Medical Association

InvocationMrs. Karl D. Winter,
Past President

AddressMrs. O. W. Robinson

2:00 P. M.

South Room

Reports of County Auxiliary Presidents

3:30 P. M.

Louis XVI Room

Tea honoring Distinguished Guests

Boyd-Carter-Greenup County Auxiliary ...Hostesses

All Doctors' Wives Invited

Wednesday, SEPTEMBER 18

9:00 A. M.

South Room

InvocationMrs. P. E. Blackerby,
State Chairman Benevolences

Roll CallMrs. J. O. Mattax

Reading of the MinutesMrs. J. O. Mattax

AnnouncementsMrs. Houston Shaw,
Convention Chairman

Report of Revisions Committee

Mrs. John Harter,
Chairman

AddressRichard R. Slucher, M.D.,
Buechel, KSMA President

Address, "Working Together" ...Mrs. Paul C. Craig,
President Woman's Auxiliary to the American Medical Association

Election of Officers

Presentation of Distinguished Guests

Installation of OfficersMrs. Paul C. Craig

Inaugural AddressMrs. J. Andrew Bowen

Announcement of Committee Chairmen

Mrs. J. Andrew Bowen

Final Report of RegistrationMrs. Guy Morford

Adjournment

1:00 P. M.

Subscription Luncheon and Style Show

in honor of

Mrs. Paul C. Craig, Wyomissing, Pa.

President Woman's Auxiliary to the American Medical Association

Mrs. O. W. Robinson, Paris, Tenn.

President Woman's Auxiliary to the Southern Medical Association

Past Presidents of the Woman's Auxiliary to the Kentucky State Medical Association

InvocationMrs. William C. Cloyd,
First Vice-President

Presentation of Distinguished Guests

Presentation of Past Presidents

Presentation of Officers

Presentation of Health Citation Award

Mrs. Earl W. Roles, Louisville,
Chairman Award Committee of Woman's Auxiliary to KSMA

Style ShowBallroom

Thursday, SEPTEMBER 19

9:00 A. M.

South Room

Pre-convention Board Breakfast (subscription) and
Meeting

PresidingMrs. J. Andrew Bowen

**WOMAN'S AUXILIARY TO THE KENTUCKY
STATE MEDICAL ASSOCIATION**

1956 - 1957

State Officers

PresidentMrs. Charles B. Stacy, Pineville
President-Elect ...Mrs. J. Andrew Bowen, Louisville
Vice-President ...Mrs. William C. Cloyd, Richmond
Vice-President ..Mrs. William H. Cartmell, Maysville
Vice-PresidentMrs. G. B. Froage, Paducah
Vice-PresidentMrs. Charles B. Johnson, Russell
Recording Secretary ..Mrs. J. O. Mattax, Carrollton
Corresponding Secretary

Mrs. Clarence Hicks, Middlesboro

TreasurerMrs. B. T. Harris, Lexington

ParliamentarianMrs. Clyde C. Sparks, Ashland

Advisory Committee

Keith P. Smith, M.D., Corbin, Chairman

R. Ward Bushart, M.D., Fulton

Rankin C. Blount, M.D., Lexington

Immediate Past Presidents

Mrs. Clyde C. Sparks, Ashland

Mrs. Karl D. Winter, Louisville

Mrs. R. Ward Bushart, Fulton

District Councilors

1st—Mrs. J. A. Outland, Murray

2nd—Mrs. William W. Wainer, Providence

3rd—Mrs. C. C. Donovan, Central City

4th—Mrs. Lyman Hall, Campbellsville

5th—Mrs. Carlisle Morse, Louisville

6th—Mrs. R. O. C. Green, Bowling Green

7th—Mrs. Donald Chatham, Shelbyville

8th—Mrs. W. Vinson Pierce, Fort Thomas

9th—Mrs. W. H. Sewell, Maysville

10th—Mrs. T. J. Overstreet, Lexington

11th—Mrs. Hugh Mahaffey, Richmond

12th—Mrs. Julian Wright, Stanford

13th—Mrs. C. I. Haeberle, Russell

14th—Mrs. John W. Bailey, Wheelwright

15th—Mrs. Daniel Bower, Williamsburg

Committee Chairmen

American Medical Education Foundation:

Mrs. Jesse T. Funk, Bowling Green

Benevolences: Mrs. P. E. Blackerby, Louisville

Bulletin: Mrs. Charles C. Kissinger, Henderson

Cancer: Mrs. James Rich, Lexington

Civil Defense: Mrs. J. A. Outland, Murray

Doctor's Shop: Mrs. Carroll Price, Harrodsburg

Finance: Mrs. J. Murray Kinsman, Louisville

Heart: Mrs. Edward S. Wilson, Pineville

Historian: Mrs. Keith Smith, Corbin

Legislation: Mrs. Raymond D. Sanders, Williamsburg

McDowell House: Mrs. Walker Owens, Mt. Vernon

Mental Health: Mrs. C. Melvin Bernhard, Louisville

Nominations: Mrs. R. Ward Bushart, Fulton

Nurse Recruitment: Mrs. John Floyd, Jr., Lexington
Program: Mrs. James S. Golden, Pineville
Public Relations: Mrs. Earl W. Roles, Louisville
Revisions: Mrs. John S. Harter, Louisville
Rural Health: Mrs. Clark Bailey, Harlan
Safety: Mrs. Robert Long, Louisville
Today's Health: Mrs. A. B. Colley, Owensboro
Tuberculosis: Mrs. Merle M. Mahr, Madisonville
Blue Grass News Editor:

Mrs. Karl D. Winter, Louisville

Blue Grass News Co-Editor:

Mrs. U. Ray Ulferts, Louisville

Publicity: Mrs. Glen Bryant, Louisville

**World Traveler Will Speak
at U of L Reunion**

Russell G. Frazier, a member of the class of 1919 and well known world traveler, will be the featured speaker at the University of Louisville School of Medicine alumni dinner and cocktail party in the Flag Room of the Kentucky Hotel on September 19, according to Leslie Shively, director of alumni relations at the University.

Doctor Frazier, who was for two years physician and surgeon to Admiral Byrd's Antarctic Expedition, headed west after his internship at Louisville City Hospital and St. Anthony's. He has led expeditions through the Grand Canyon River to Boulder Dam, and served as company physician in the copper mines of Utah until his retirement in 1951.

Sponsored by the faculty of the medical school, the fourth annual cocktail party will be held from 5 to 7 p.m. All KSMA members have been invited by J. Murray Kinsman, M.D., dean of the medical school, to attend the cocktail party. Dinner for the 10 reunion classes in the Flag room will follow the cocktail party.

The reunions, held in conjunction with the Annual Meeting, will be in honor of the classes of '07, '12, '17, '22, '27, '32, '37, '42, '47, and '52.

Physicians Serving as arrangements chairmen for the reunion classes are:

1912, C. E. Gaupin and Hiram Eggers,
Louisville

1917, Lytle Atherton, Louisville

1927, R. O. Joplin, Louisville

1932, Samuel Gordon, Louisville

1937, Charles Bryant, Louisville

1942, Harold Berg, Louisville

1947, Stuart Urbach, Louisville

1952, Nathan Zimmerman, Louisville

The Alumni office is making arrangements for the classes of '07 and '22.

Two Physicians to Be Selected For KSMA's Annual Awards

Two KSMA members will be selected again this year by the House of Delegates to receive the Distinguished Service Medal and the Outstanding General Practitioner Award, according to Hugh P. Adkins, M.D., Louisville, chairman of the Awards Committee.

The procedure, revised in 1955, calls for the Awards Committee to make its nominations for the two high honors at the first meeting of the House on Monday night, September 16. The matter will come to a vote at the second session of the House on Wednesday night, September 18, when additional nominations may be made from the floor.

Serving with Doctor Adkins on the Awards Committee are R. Ward Bushart, M.D., Fulton; Glenn U. Dorrol, M.D., Lexington; Barton L. Ramsey, Jr., M.D., Somerset, and Edward L. Smith, M.D., Covington.

Last year's winners were Joseph T. Maloney, M.D., Covington, Distinguished Service Medal, and the late Clarence T. Coleman, M.D., Frankfort, Outstanding General Practitioner Award.

65 Exhibitors Display New Products At 1957 Annual Meeting

What's new and useful to today's practitioner? That question—uppermost in the minds of most physicians—can be answered by a visit to the booths in the Technical Exhibit Hall of the 1957 Annual Meeting where new developments in practically all fields of medicine will be found.

Proved prescription products, good books, diagnostic aids, medical and surgical instruments, and many other products and services needed by the modern physician will be on display.

This year, 65 exhibitors will be on hand to pass along new ideas and information and to display new products of value to medical practitioners, according to William O. Johnson, M.D., Louisville, chairman of the Committee on Technical Exhibits.

The technical exhibits, actually a summary of progress in industries closely allied to medicine, officially open on Tuesday morning, September 17 at 8 a.m. They will open each day at 8 and close at 5:30, except on Thursday when they will close at 3:30 p.m.

The program committee has scheduled intermissions during both the morning and afternoon sessions, as well as between and after sessions, for visiting the exhibits.

Color Television A Highlight of Scientific Program

Feature presentation of the Annual Meeting on September 17, 18 and 19 will be eight and one-half hours of closed circuit TV, originating from Louisville General Hospital and presented by the staff of the University of Louisville School of Medicine, according to Richard R. Slucher, M.D., KSMA president and chairman of the Committee on Scientific Assembly.

The committee on color television, headed by Rudolf J. Noer, M.D., professor and head of the department of surgery at the University of Louisville, has planned a series of diversified programs which will be relayed to the meetings in the Columbia Auditorium by color television facilities supplied by Smith, Kline and French.

Doctor Slucher expressed the appreciation of KSMA to SKF and to Doctor Noer and his committee for their excellent work. All of the programs presented will have been rehearsed at least three times before presentation.

Three hours of color television will be a highlight of Tuesday's scientific sessions, with a program running from 8:30 a.m. to 10:00 a.m. and another from 1:30 p.m. to 3:00 p.m. On Wednesday, participants in the meeting will have the opportunity to watch a symposium on the duodenal ulcer from 8:30 a.m. to 11:30 a.m. A panel on tuberculosis will fill the Thursday morning session from 8:30 to 10:00. That afternoon, television will run from 1:30 to 3:00.

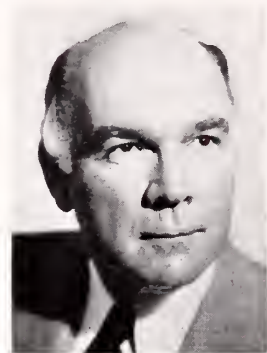
Call JU 7-6903 for Physicians

A special telephone will enable physicians to keep in close touch with their homes, offices and hospitals while they're attending the KSMA Annual Meeting at Columbia Auditorium in Louisville, September 17, 18 and 19. They can be reached by calling JUNiper 7-6903.

This is the eighth year a special telephone set-up has been arranged by the Southern Bell Telephone Company and Columbia Auditorium. Four booths located near the main entrance of the auditorium will be available for physicians desiring to make outside calls.

Dr. Kenneth McFarland to Speak at President's Luncheon

"Ropes of Gold" is the subject chosen by Dr. Kenneth McFarland, Topeka, Kansas, nationally known educator and lecturer, for his address as guest speaker at the annual President's Luncheon, Wednesday, September 18, on the Roof Garden of the Brown Hotel at 12 noon.



Dr. McFarland, who serves as educational consultant and lecturer for General Motors, appears in Louisville through the courtesy of that Corporation.

Widely recognized as a leader in the field of education, Dr. McFarland is constantly in demand as a speaker for business and civic groups. A native Kansan, he graduated from Pittsburgh State College in Kansas, obtained his Master's Degree from Columbia and his Doctor's degree from Stanford University.

Named "America's Number One Airline Passenger" by a transcontinental airline, his travels give him the advantage of "on-the-spot" observation and reporting.

Richard R. Slucher, M.D., Buechel, President of KSMA, will preside over the meeting.

The system of using color tickets at the President's Luncheon will be discontinued this year, according to Richard R. Slucher, M.D., Buechel, KSMA president. Only 325 tickets will be sold and anyone purchasing a ticket will be assured of a seat. Seating arrangements will be on a first come, first serve basis, Doctor Slucher stated.

Annual Meeting to Memorialize 1877 KSMA President

The 1957 Annual Meeting of the Kentucky State Medical Association has been designated as the R. W. Gaines Memorial Meeting, in tribute to the memory of the Association's president in 1877. This is in keeping with a custom started in 1935 of honoring a past president or some distinguished Kentucky physician each year.

An interesting biographical sketch of Doctor Gaines has been written by KSMA Historian Emmet F. Horine, M.D., Brooks, for the program booklet which will be distributed at this year's meeting at Columbia Auditorium in

Louisville, September 17, 18 and 19.

The 1956 meeting honored the Association's 18th president, J. A. Hodge, M.D., who served in 1876.

OFFICIAL CALL ANNUAL MEETING KENTUCKY STATE MEDICAL ASSOCIATION

To the officers and members of the component county societies of the Kentucky State Medical Association.

Meeting Place

The Annual Meeting of the KSMA will convene at the Columbia Auditorium, Louisville, Tuesday, Wednesday and Thursday, September 17, 18 and 19, 1957. The General Session will be called to order at 8:15 AM Tuesday.

The House of Delegates

The first regular session of the House of Delegates will convene at 7:00 PM, Monday, September 16; the second regular session will begin at 7:00 PM, Wednesday, September 18. Both sessions will be held in the Columbia Auditorium.

Registration

The registration department will be open in the Columbia Auditorium from 6:00 PM to 8:00 PM Monday, September 16 from 7:45 AM to 5:00 PM on Tuesday, September 17; from 7:45 AM to 5:00 PM and 6:00 PM to 8:00 PM on Wednesday, September 18, and from 7:45 AM to 5:00 PM on Thursday, September 19.

WOMAN'S AUXILIARY to the KENTUCKY STATE MEDICAL ASSOCIATION

Tuesday, September 17, Brown Hotel
Pre-convention Board Breakfast, 9 AM, Parlors A, Brown Hotel; Formal opening of the thirty-fifth Annual Meeting, 10:30 AM, South Room.

Wednesday, September 18, Brown Hotel
Morning session, 9 AM, South Room; Afternoon session, beginning with a subscription luncheon; Style show at 1 PM in the Ball Room.

Thursday, September 19, Brown Hotel
Post-convention Board Breakfast (subscription) and meeting, 9 AM, South Room.

Registration

The registration department of the Woman's Auxiliary will be open in the North Bay of the lobby of the Brown Hotel on Monday, September 16 from 12 noon to 5 PM; Tuesday, September 18, 9 AM to 5 PM and Wednesday, September 18, 9 AM to 11 AM.



This is a portion of the course at the Standard Country Club on Brownsboro Road where this year's KSMGA tournament will be held. The course may be reached by turning south off Brownsboro, opposite Barbour Lane.

Choose Standard Country Club for 1957 Golf Tourney

The Standard Country Club is the site chosen for the annual Kentucky State Medical Golf Association tournament, September 16-19, according to Robert C. Long, M.D., chairman of the golf committee.

Although physicians and guests are encouraged to play every day of the tourney, only the score made the first day of play will count in the contest for tourney prizes, according to Doctor Long.

Traveling trophies and permanent awards will be presented winners in the low gross, low net, and senior championship classifications, and attractive day prizes will also be given to low gross and low net winners.

The annual \$5 dues for membership in the golf association should be mailed to the secretary of KSMGA at KSMA's new headquarters, 1169 Eastern Parkway, Louisville.

Other members of the golf committee are: Clifton M. Follis, M.D.; Martin Z. Kaplan, M.D.; Kenton Leatherman, M.D.; Robert Riechert, M.D.; and William Wolf, M.D.

12 Specialty Groups Featured at 1957 Annual Meeting

The Kentucky Public Health Physicians have joined the ranks of specialty groups at the 1957

Annual Meeting, bringing the number to 12, according to Richard Slucher, M.D., Buechel, KSMA president.

Talks by prominent national and local speakers will be featured at each group's afternoon long scientific program on Wednesday, September 18.

KSMA members are free to visit any of the meetings which run simultaneously.

Aimed primarily at those who limit their practice, these specialty group sessions are more technical than those presented at the general assembly. They offer the opportunity to get the latest information on advancements in a particular field, according to Doctor Slucher.

Other specialty groups participating in the meeting are: Kentucky Society of Anesthesiologists; Kentucky Chapter, American College of Physicians; Kentucky Eye, Ear, Nose, and Throat Society; Kentucky Chapter, American Academy of General Practice; Kentucky Obstetrical and Gynecologic Society; Kentucky Orthopedic Society; Kentucky Chapter, American Academy of Pediatrics; Kentucky Chapter, American College of Physicians; Kentucky Psychiatric Association; Kentucky Radiological Society; and Kentucky Chapter, American College of Surgeons.

H. C. Jones, M.D., surgeon of Berea, was cited as "Most Valuable Citizen" by the Berea Lions Club at its June 12 meeting.

The JOURNAL of the Kentucky State Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 55

AUGUST, 1957

NO. 8

OBSTRUCTION OF THE COLON

BRANHAM B. BAUGHMAN, M.D.

Frankfort

THIS not uncommon and difficult surgical problem has been of interest to me for a number of years. My paper is based on a modest review of the literature and upon a small series of cases which illustrate various aspects of etiology, symptomatology and treatment of the underlying disease producing the obstruction. Obstruction of the small bowel will be referred to only for comparison of certain aspects. Since my cases extend over a period of fifteen years, changing concepts of treatment will be noted.

Historical

According to Cope¹² the following are the landmarks in the history of the surgery of the large bowel:

1710. Litré, a French surgeon, suggested the possibility of proximal decompression of the colon for obstruction produced by imperforate anus.

1776. Pillore successfully performed cecostomy for complete obstruction produced by cancer (described in detail by Amussat).

1783. Dubois performed the first colostomy for imperforate anus.

1797. Fine carried out the first colostomy for obstruction in an adult woman.

1812. Benjamin Travers published researches on intestinal suture.

1815. Baron Dupuytren performed the first operation for artificial anus using his special clamp (enterotome).

1818. George Freer did the first colostomy for obstruction in Great Britain.

1826. Lambert, a pupil of Dupuytren, described his intestinal suture.

1836. Dieffenbach described the first account of a successful intestinal resection using Lambert's suture.

1839. Amussat described and performed successfully his lumbar colostomy.

1892. Oscar Bloch described exteriorization procedure for cancer of the colon.

1893. Lindstedt performed the first successful operation for volvulus of the sigmoid colon in Sweden.

1895. Clark did the first successful operation for volvulus recorded in Great Britain.

1895. F. T. Paul published account of the first successful resection of the colon in obstruction using "Paul's tubes."

Incidence

This is difficult to determine. According to Brindley,⁷ the ratio of small to large bowel obstruction is about 4 to 1. Michel²⁴ reports 5 or 6 to 1. Burgess⁸ reports that 18 per cent of 1278 cases were in the colon. Graham¹⁷ found 23 per cent of 104 cases in the colon. Pool and Dunavent²⁶ found 9.2 per cent of 522 cases in the colon. Becker, Davis and Lehman⁵ found 10.1 per cent of cases of obstruction occurred in the colon. From the observations of many it is concluded that 10 per cent of carcinomas of the colon produce obstruction. About 80 to 85 per cent of all cases of large bowel obstruction are due to lesions of the left colon.

Etiology

1. Carcinoma of the large bowel.
65 (Dennis)¹⁵ to 90 (Wangensteen)³⁰ per cent.
2. Volvulus.
8 (Griffin, Barton and Meyer)¹⁹ to 20 (Michel)²⁴ per cent.
3. Diverticulitis. Much less common.
2 to 4 per cent.

The above three account for about 90 per cent of all colon obstructions. The next group,

though much less frequent, must be considered.

4. Adhesions.
5. Foreign bodies (gall stones etc.)
6. Fecal impaction.
7. Hernia.
8. Extrinsic causes.
Pelvic disease. Benign or malignant.
9. Intussusception.

Symptoms and Clinical Manifestations

Anorexia is very common.

A feeling of fullness or abdominal discomfort.

Increasing constipation, although diarrhea may occur. A few small bowel movements and the passage of gas may occur until the final complete obstruction takes place. One of my patients had no bowel movement for nine days.

Distension is marked and universal. This is because the ileocecal valve is nearly always competent and a closed loop obstruction is present. The most pronounced distension is present in cases of volvulus.

Vomiting is uncommon. It may occur a few times and is more common in volvulus. This too is due to a closed loop obstruction.

Blood and mucus in the stools are common in cancer.

Pain is not common, nor is it sudden, severe or dramatic as is the case in small bowel obstruction. It is usually cramplike. There is an exception to this in very acute obstruction, more common in my experience in volvulus. In this condition pain is severe and sudden.

Palpation reveals a doughy resistance but very little tenderness. If there is tenderness and muscle spasm, strangulation or perforation is usually present.

Auscultation may reveal increased peristaltic sounds but not the typical rushes present in small bowel or high obstruction.

Dehydration and electrolyte deficiency are less prominent but will be present late due to lack of intake.

Anemia and weight loss are symptoms of advanced cancer.

Sigmoidoscopy preceded by a careful rectal digital examination is very valuable. This may be a therapeutic, as well as a diagnostic measure. Many cases of volvulus have been relieved by passing a catheter through a sigmoidoscope. In one of my cases a sigmoidal carcinoma was seen, and a biopsy made in this manner, then partial decompression was obtained by a catheter passed through the instrument.

X-ray is the most important single diagnostic aid.

1. Never give barium by mouth.
2. Scout film or flat plate usually is diagnostic. The pattern conforms to the anatomical position of the colon and shows haustral markings. One may be able to determine the site of obstruction from the flat plate alone. An upright and a lateral film should also be taken.
3. Barium enema, if carefully given, is usually harmless and is an excellent diagnostic aid. One must be careful if the obstruction is incomplete and not run too much barium above the lesion lest it become impacted.

Treatment

The colon, from the standpoint of anatomy, physiology and embryology must be regarded as two organs, the right and the left. The right half arises from the midgut, the left half from the hindgut. The right is larger; the left is smaller and its walls thicker. The right receives its blood supply from the superior mesenteric, the left from the inferior mesenteric artery and branches. The right half is concerned with absorption of fluid contents, the left with storage.

Malignant lesions of the right are large, fungating, mucus-forming, bulky and protrude into the lumen. Lesions of the left are flat, annular, ulcerating and constricting. Because of these facts, the location of a lesion has a direct bearing on treatment as well as upon symptoms and course.

The objective in colon obstruction is decompression for relief of symptoms and to prepare the bowel for subsequent resection. In small bowel obstruction it is entirely proper to combine definitive surgery with relief of obstruction. This cannot often be done in colon obstruction because of the thin bowel wall, frequently with impaired circulation, which will not stand trauma. The surgical management must be met surely and quickly.

Non-Surgical Treatment. Replacement of fluids, electrolytes, and blood is standard procedure. Where time permits, the preparation of the bowel by enemas, oral antibiotics, and chemotherapeutic agents is generally accepted. A combination of Sulfasuxidine® or Sulfathalidine,® and neomycin or Chloromycetin® for 5 to 7 days has been quite satisfactory.

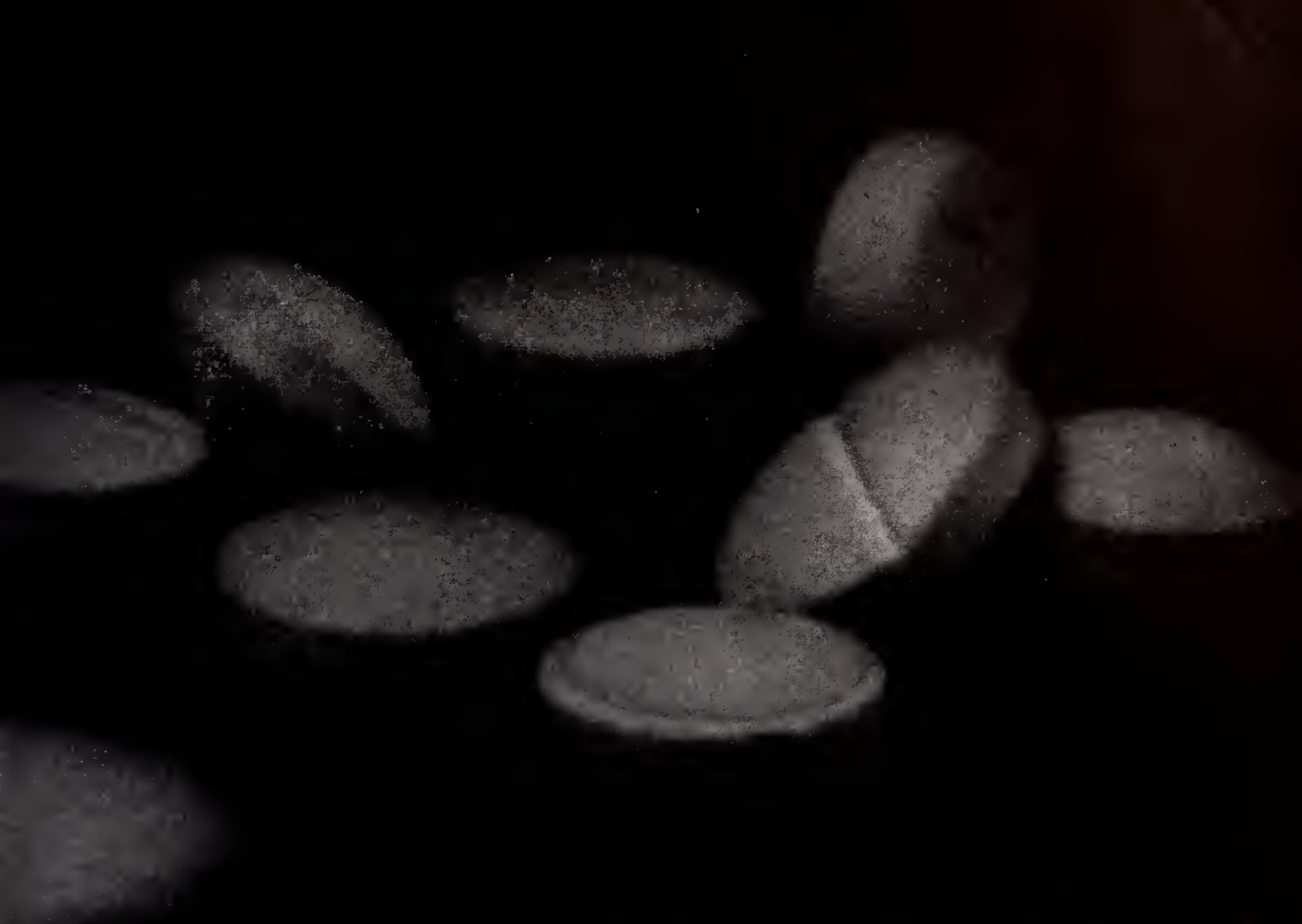
In the opinion of Wangenstein,³⁰ Cole,⁹ and most writers on the subject, intestinal intuba-

2=8



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(1) Boger, W. P.; Strickland, C. S. and Gylfe, J. M.: *Antibiot. Med. & Clin. Ther.* 3:378 (Nov.) 1956.

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tion by a nasogastric tube is contraindicated to effect decompression in colon obstruction. It frequently lulls us into a false sense of security, as illustrated in two of my cases, by removing the contents of the small bowel. It is useful as an adjunct to empty the stomach and duodenum, especially before or at the time of definitive surgery.

One must always make an effort at non-surgical decompression, since many malignant lesions do not produce complete obstruction. The surgeon must not let his enthusiasm for one-stage operations trap him into fatal short cuts. However, by careful and conservative treatment, especially with the aid of the sigmoidoscope and rectal tube, I was able to relieve four of the six carcinomas and three of the benign lesions so that only one surgical procedure was necessary for each.

Many torsions of the sigmoid may be relieved by proctoscopy and intubation as recommended by Bruusgaard.²⁵ The danger here is whether gangrene is present or imminent and this can only be determined visibly. One of my cases died of this condition. Most cases of volvulus, if they are not too old, should undergo an elective resection of the sigmoid.

Surgical Decompression. This was required as a primary emergency measure in six cases. Ileotransverse colostomy is an excellent operation for lesions of the right colon but, since they rarely cause complete obstruction, one can usually avoid this and do a one-stage resection.

For many years cecostomy has been the procedure of choice for lesions of the cecum and right colon, either by tube or exteriorizing procedure. It was the choice of Haggard, Graham, Allen and Welch,³ and Rankin and Johnston,²⁸ although the latter recommended exteriorization whenever possible. The present trend is to use cecostomy mainly for perforation, abscess or gangrene of the cecum, and for the rare instances of acute obstruction of the ascending colon and hepatic flexure.

Transverse colostomy is the most satisfactory method of decompression of the left colon, regardless of the cause of obstruction. It was used in three of my cases. Its advantages are: (1) much lower mortality than cecostomy, (2) easier to perform, (3) provides complete decompression, (4) completely diverts the fecal stream, (5) eliminates possibility of an irrational patient pulling out a tube, (6) permits

the right colon to empty its putty-like contents by its own peristaltic action, (7) bowel wall is healthy, and (8) the opening is removed from the area of subsequent incision for resection.

Definitive Surgery. In cases of benign extrinsic lesions and obstruction due to adhesions the relief of the latter or removal of the offending cyst or tumor or repair of a hernia and reduction of its contents is sufficient for a cure.

Primary Resection. Immediate resection may occasionally be the only choice in gangrenous volvulus.

In cancer primary resection is the operation of choice provided, of course, that decompression has been satisfactory. In two of my early cases a Bloch-Paul-Miculicz exteriorization, improved by Rankin²⁷ and called "obstructive resection" was performed. It was a safe operation but is used much less frequently today. One can scarcely do as radical a resection of bowel and mesentery with this procedure as is possible with a primary resection.

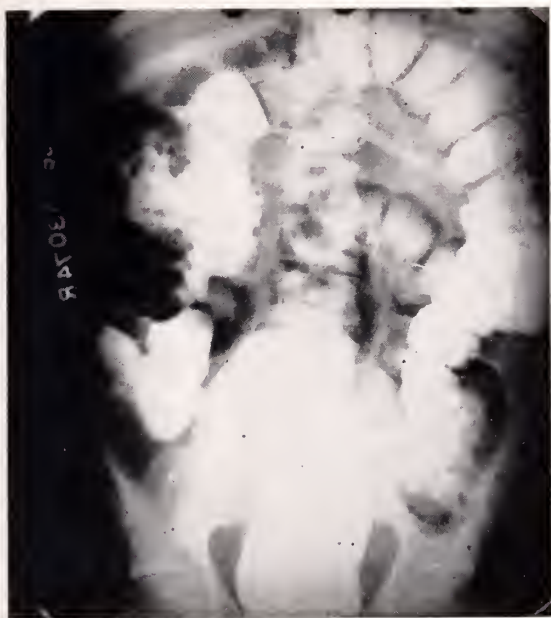
A satisfactory resection consists of: (1) proximal and distal ligation of the bowel to prevent spread of cancer cells by handling as shown by the researches of Cole,¹⁰ (2) ligation of the blood supply, (3) en bloc removal of an entire half or more of the colon after careful dissection and mobilization followed by (4) an open end-to-end anastomosis without tension, using two layers of sutures, an inner catgut interrupted or interlocking continuous, and an outer interrupted cotton suture layer. The peritoneal cavity is not drained, although the retroperitoneal dead space may be drained through a stab wound. The fascia is closed with 000 Surgaloy wire. The skin and subcutaneous tissues are closed by the delayed closure method described by Collier and Valk,¹¹ since this is a contaminated wound, and since this method controls wound infection.

Following the suggestion of A. W. Allen² the anal sphincter is well dilated and post-operatively four ounces of normal saline is instilled daily until gas is passed. A Levine tube is kept in the stomach for 2 or 3 days, and more recently a temporary gastrostomy is done after the suggestion of Farris¹⁶ and others for suction rather than the nasogastric method. This is much less uncomfortable to the patient and rarely causes any difficulty. It should be emphasized that the preservation of adequate blood supply to the anastomosed bowel ends is essential to healing.

Two cases in which the anastomosis seemed quite narrow by post-operative barium studies have had no physiologic difficulty. The two obstructive resection cases both died of metastases in less than two years. One resection which followed a colostomy died in one year of metastasis but no local recurrence was present. One primary resection died of a vascular accident ten days after operation. Six primary resections for cancer are alive and well from six months to 10 years after operation, a survival rate of 60 per cent.

Case Reports

CASE 1. S. R., a 40-year-old white male, was admitted to the hospital because of vague abdominal symptoms and considerable loss of weight. He was mentally defective and a careful history was not obtainable. Examination re-



Case 1. 40-year-old male with colloid adenocarcinoma of ascending colon. One stage resection of right colon on 7/23/56, portion of terminal ileum and portion of transverse colon. Nodes positive. Patient gained 40 pounds and is well at present.

vealed moderate pallor, obvious loss of weight and a palpable mass in the right upper quadrant. Bowels had moved very little in the past week but there had been no vomiting. Hb. 42%. RBCs. 3,590,000. Barium enema; obstructing lesion of ascending colon, probably cancer. Patient was prepared for seven days with liquid diet, blood transfusions, Sulfasuxidine and Chloromycetin.

On July 23, 1956, a one-stage resection of the terminal ileum, ascending colon and portion

of the transverse colon was performed with an open end-to-end ileocolostomy to restore continuity. The sphincter was dilated and a nasogastric tube and suction were used for three days. Diagnosis: colloid adenocarcinoma involving the ascending colon as an annular lesion with metastases to regional lymph nodes. Uneventful recovery. Alive and well today but prognosis poor. Has gained 40 pounds.

CASE 2. Mrs. S. B., 59-year-old female, admitted to the hospital with the complaint of pain around the navel for three days, with nausea and vomiting the first day only, cramp-like pain for several days, normal bowel movements, good appetite and indigestion for years. She had some pain in the left upper quadrant for several days. Temperature 100°, WBC 9,200, 75% Polys. Examination showed an obese healthy woman in moderate pain, with tenderness around the umbilicus. Scout film; no gas seen and no distention but a huge vertical gall bladder filled with stones 1-3 cms. Rectal and sigmoidoscopic negative.

At operation on September 30, 1953, the large thick gall bladder full of stones was removed. Exploration revealed a large hard mass in the transverse colon near the splenic flexure which was thought to be cancer. Considerable inflammation was present around the lesion; marked distension of the cecum was present. Accordingly a loop of transverse colon was brought out the lower angle of the upper right rectus incision over a rod. The colostomy was opened the second day and irrigations begun. Recovery was complicated by pulmonary embolism on the eighth day followed by ventricular fibrillation. She recovered and went home the 25th day.

She returned three weeks later for resection of the bowel. A barium enema showed no evidence of a filling defect in the splenic flexure or elsewhere in the colon. However, numerous diverticuli were present. She was explored through a transverse incision, and a normal colon, with no evidence of the previous lesion, was found. The colostomy which had been complete was then closed by an end-to-end anastomosis. The patient has remained well for four years.

This case shows the result of jumping at a diagnosis because of two obvious conditions, first the gall stones and secondly the mass, which I thought was cancer. My face was red

from telling the family that mother had cancer and was in a serious condition. In their gratitude at her recovery they forgave me for the wrong diagnosis, but failed to pay me.

CASE 3. R. W., colored soldier, age 27.

1. August 6, 1944. Admitted to an Army station hospital with a history of pain in abdomen and right side for three months with occasional nausea and vomiting; under antiluetic treatment. Discharged.

2. August 17, 1944. Three days after discharge, admitted with pain in right lower quadrant, nausea and vomiting. Appendectomy August 19, 1944. Symptoms continued without improvement.

3. November 14, 1944. Given barium by mouth. Stomach and duodenum normal. Barium seen in cecum, ascending, transverse and descending colon; no abnormality noted. Discharged December 28.

4. December 31, 1944. Readmitted with acute abdomen. No bowel movement for several days. January 2, 1945, given barium by mouth; after 13 days it was seen in small bowel and colon proximal to splenic flexure where there was obstruction with marked dilation of ascending and transverse colon.

5. January 23, 1945. Transferred to Camp Polk hospital with diagnosis of obstruction of colon. Miller-Abbott tube inserted, giving some relief.

6. January 25, 1945. Operation through right rectus incision. Hard mass felt at splenic flexure. Cecostomy performed using large Pezzer catheter. Miller-Abbott tube left in place, almost to cecum. Patient recovered from obstruction.

7. February 2, 1945. Colon mobilized proximal and distal to lesion: Rankin obstructive resection done, removing a large portion of mesentery, bowel and tumor. Patient recovered. Cecostomy tube removed six days later, and opening closed promptly. Pathologic report: adenocarcinoma, Grade 3. Several nodes were positive. Liver showed no gross metastases.

8. April 1, 1945. Colostomy closed, patient did well and was finally discharged from the service.

9. Report received one and a half years later that patient died of metastases in a veterans' hospital.

CASE 4. Mrs. H. S., 58-year-old female, was admitted to the hospital December 15,

1949, with a history of pain in the lower abdomen and fever for 10 days. Bowels were said to be normal. A mass was palpated in the lower abdomen and pelvis. A correct preoperative diagnosis was not made but at operation a carcinoma of the sigmoid with perforation and abscess was found. A resection with end-to-end anastomosis was done and the Collier delayed closure of the skin was done. Diagnosis: Papilliferous adenocarcinoma of sigmoid, Grade 2, with perforation. The patient recovered and is alive and well eight years later.

CASE 5. Mrs. L. L., 74-year-old white female, was admitted to the hospital December 4, 1952, with the diagnosis of acute intestinal obstruction. She had suffered from cramplike pain in the abdomen for a few days, preceded by constipation for some time. She had suffered severely all day before her admission that evening. The abdomen was distended, no tenderness or rigidity. Rectal negative. After enemas



Case 5. 74-year-old female with acute obstruction of colon. Diagnosis of adenocarcinoma, grade 2, of sigmoid made by biopsy through sigmoidoscope. One stage resection of sigmoid performed 12/4/52. Patient well to date.

a proctosigmoidoscopic was done and at about 20 cms. an obstructive lesion was seen. A piece was taken for biopsy and a catheter was inserted into the narrow lumen through the sigmoidoscope. Biopsy report: adenocarcinoma, Grade 2.

The patient passed gas and was gradually decompressed under liquid diet and daily enemas. The bowel was prepared: eight days

after admission a primary resection of the lower sigmoid was done with an end-to-end anastomosis and a Collier delayed closure of the skin. The patient recovered and has remained well four and a half years. Annual sigmoidoscopic examinations have been done.

CASE 6. Mrs. A. P., age 73, white female, was admitted to the hospital on October 15, 1950, with symptoms of low grade obstruction. Barium enema revealed obstruction at the recto-sigmoid. Sigmoidoscopy showed no lesion in the lumen but marked narrowing. The preoperative impression was cancer. At operation no tumor was found but the sigmoid was densely adherent to the pelvic wall, left tube, and ovary. The impression was that acute diverticulitis with perforation had been present at a previous time. The sigmoid was dissected free and the patient recovered.

CASE 7. F. A. S., 24-year-old white soldier was admitted to the Camp Polk Regional Hospital November 12, 1945, with a history of severe pain in the abdomen and nausea. Two days before he developed cramplike abdominal pain and was admitted to a Station Hospital where he was given several enemas without relief and a tube was put in his stomach. He was not relieved and vomiting began and continued. He had had previous similar attacks of pain, nausea and vomiting lasting three or four days for almost ten years. Upon admission the abdomen showed marked distension all over. X-rays showed a markedly dilated colon with a C-shape. Before admission he said he was given four quarts of enemas which did not return.

He was operated upon, on the day of admission, through a right McBurney incision and a large Pezzar catheter inserted through a trochar into what was thought to be the cecum. Seven days later this part of the colon was opened widely with a cautery. He recovered; later barium studies showed the opening to be in a rotated loop of sigmoid. The diagnosis was volvulus. One month later, ten inches of sigmoid was resected and an end-to-end anastomosis was done. The patient made an uneventful recovery.

CASE 8. Mrs. E. V., a 27-year-old white female, was admitted to the hospital November 7, 1956, complaining of sharp colicky pain in the left lower abdomen and pelvis. There



Case 8. 27-year-old female with severe colicky pain in lower abdomen and pelvis with nausea and vomiting. Diagnosis: obstruction of colon from extrinsic lesion. At operation sigmoid was obstructed from a large ovarian dermoid cyst with twisted pedicle.

was occasional nausea and she vomited once or twice. The pains were cramplike and were not constant. Bowels were fairly normal. Examination revealed considerable distension of the lower abdomen with suggestion of a mass. Barium enema diagnosis was obstruction of the low sigmoid, probably carcinoma. Sigmoidoscopy showed no intrinsic lesion but marked narrowing of the low sigmoid.

My diagnosis was obstruction of the colon from an extrinsic lesion. Operation, after adequate bowel preparation with Sulfasuxidine® and neomycin (the latter for 24 hours), revealed a large ovarian dermoid cyst on the left, strangulated from a twisted pedicle, and the sigmoid involved in the mass. The cyst was removed; the sigmoid freed, and the patient recovered.

CASE 9. Mrs. E. S., a 66-year-old white female, was treated four years previously for squamous cell carcinoma of the cervix, Grade 3, by radium and x-ray. For several months before this admission she suffered from marked obstipation. At this time her bowels had not moved for seven days despite laxatives and enemas. There was marked distension of the abdomen and a fixed mass in the pelvis. Rectal



Case 9. 66-year-old female treated four years previously for carcinoma of cervix with radium and X-ray. Months before admission suffered from severe obstipation. At this time, no bowel movement for seven days. X-ray shows marked distension of colon. At operation complete obstruction of pelvic colon found, due to metastatic carcinoma of cervix. Transverse colostomy done.

was negative. Scout film showed distension of the colon.

On March 21, 1956, a permanent transverse colostomy over a tube was done. A frozen pelvis was present with complete obstruction. She was relieved and improved considerably. She died 18 days later of what was thought to be small bowel obstruction. Our diagnosis was acute obstruction of the colon from an extrinsic lesion (carcinoma of cervix).

CASE 10. S. L., a 49-year-old male inmate of the Kentucky State Reformatory, was admitted to the hospital complaining of pain in the abdomen and inability to move the bowels. There was no other history whatever. The man was of very low intellect. The lower abdomen was somewhat distended but not greatly so. An attempted enema met with an obstruction in the rectum and a digital examination, followed by an X-ray, showed a tin can, 4-5 ounce size, tightly impacted in the rectum. Under spinal anesthetic efforts at removal were unsuccessful until an incision was made laterally through the sphincters. The rectal mucosa was gray and thin from pressure but no perforation could be seen. The patient made an uneventful recovery.



Case 10. 49-year-old male. Psychopathic inferior, admitted 2/26/55, with obstruction of bowel due to foreign body (5-ounce can) in lower section. No history of insertion admitted. Can removed and patient recovered.

Summary

This paper is based upon the experience with the surgical treatment of 18 cases of obstruction of the large bowel. The breakdown was as follows:

I.	Carcinoma	10
	1. Cecum and ascending colon	2
	2. Splenic flexure	2
	3. Left colon including sigmoid	6
II.	Volvulus	2
III.	Diverticulitis	2
IV.	Adhesions	1
V.	Extrinsic causes	2
VI.	Foreign body	1

This condition presents symptoms far less severe and dramatic than those of small bowel obstruction, except in very acute colon obstruction, particularly volvulus.

Cramplike pain, distension, and constipation are the most common symptoms. The diagnosis can usually be made by a scout film or a careful barium enema or a sigmoidoscopic examination.

Treatment is directed primarily to the relief of obstruction and should usually be a cecostomy or transverse colostomy, followed by elective resection. Many times one may be fortunate enough to decompress the bowel by medical management, eliminating two additional

operations. Volvulus may often be relieved by sigmoidoscopy, followed later by resection.

About 80 per cent of all colon obstruction is caused by left colon lesions.

Cancer of the colon is responsible for 65 to 90 per cent of all cases of obstruction. Volvulus is the next most common cause. A number of other lesions occasionally produce obstruction of the large bowel.

The mortality of surgery for colon obstruction is still high, especially for acute obstruction, ranging from 5 per cent to 56.9 per cent in several reports^{7,13,15,21,23,31}. My own mortality in this series was 11.1 per cent.

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A CONSIDERATION OF PHYSIOLOGIC CHANGE IN THE HYPOTHERMIC STATE WITH EMPHASIS ON VENTRICULAR FIBRILLATION*

THEODORE N. LYNCH

THE interest in hypothermia can be said to be based on the clearly demonstrated principle of chemistry that the speed of a reaction is approximately doubled with each 10°C increase in temperature. If the converse were true and were applicable to biological systems it would be possible, through chilling, to drastically reduce the cellular demand for oxygen and other metabolites. The further implication would be the feasibility of surgical procedures which necessitate the temporary curtailment of vital supplies to the tissues, specifically, open cardiac surgery.

Since the first publications by Bigelow and his group in 1950,^{1, 2, 3} the subject of hypothermia has undergone extensive and intensive study on both the experimental and clinical levels. Cardiac surgery under direct vision has been made possible and procedures heretofore rarely attempted are being performed more commonly and with greater safety. The marked reduction of body temperature is not without its own peculiar hazards but these have not had an entirely negative effect, in that attempts to avoid or cope with them have led to research in basic physiology that has contributed to a clearer understanding, particularly of heart processes.

A point which is at the present time of purely academic interest is mentioned here because of its possible future significance. Some animals, such as bears and groundhogs, the hibernating animals, live part of each year as homothermic animals and part as poikilothermic. The groundhog has been studied and it is reported⁴ that this animal can, while hibernating, be reduced to levels of 3°C with no apparent harm and without the use of supportive measures. Comparative studies of the blood at this and at the groundhog's homothermic temperatures show no changes which might explain the tolerance to temperature change. The tolerance is attributed to the secretion of a large endocrine gland found in the thorax and axillae of the

animal. Attempts are being made to extract the active principle of this gland in order that its instillation into other animals might be studied.

For the present, though, hypothermia is being induced in animals, largely dogs and humans, which are strictly homothermic. It therefore becomes of importance to know the nature of the physiological changes which occur in this abnormal state.

Oxygen Consumption

Oxygen consumption in hypothermic animals has been found³ to be diminished to such an extent that a dog, whose normal temperature is 38°C , has a utilization of only 15-20% of normal at 20°C . By extrapolation this descending consumption curve would approach 0% at 10°C . The absence of any significant rise in the levels of blood lactate and pyruvate was assumed to signify no hypoxia. Also noted was the fact that on restoration to normal temperatures the animal demonstrated no "oxygen debt," further evidence that cellular needs were met during the hypothermic period. A not unexpected finding was that oxygen consumption was elevated by any shivering on the part of the subject. Pentathol sodium was found to be sufficient to correct this.

As the temperature of the body is lowered the subject is observed to go into a state of "cold narcosis." Below 28°C the dog requires no anesthesia.^{1, 2} Anesthesia may be discontinued in the human at 31°C .⁵ Bigelow¹ observed that canine respiration ceased at $23-25^{\circ}\text{C}$ and artificial means had to be employed. This fact is not of great importance for, as will be pointed out later, forced hyperventilation is used routinely from the normothermic state on down. The pulse rate of the normal dog is 120-160/min. at 38°C . During hypothermic induction the rate was found to increase by 15-20 beats/min. as the animal reached 37°C but then to decline precipitously and reach a level of 15-30/min. at 20°C . During rewarming, a sudden acceleration is followed by a steady climb to levels slightly higher than normal.² Studies of arterial pressures² reveal a curve generally similar to that of the heart rate but showing a leveling off or a slight rise between 28°C and 24°C . Cardiac output determina-

**The second of two essays selected by the faculty of the Department of Surgery, School of Medicine, University of Louisville, as the outstanding term papers for the junior course in surgery. The editors of the Journal of the Kentucky State Medical Association have awarded each of the authors a year's subscription to The Journal.*

tions² show a curve paralleling the heart rate curve. Venous pressure in hypothermia is increased at all times but the rise is greatest during periods of artificial respiration or shivering.² The circulating blood volume, as determined by studies employing T-1824, is reduced by approximately 10%. This, coupled with a distinct rise in hematocrit^{6, 7} must signify injection of red cells into the bloodstream from some reservoir such as the spleen. There is some increase in mean cell volume in the hypothermic state⁸ but this is not sufficient to explain the rise in hematocrit. Computing total peripheral resistance in the vascular tree by the ratio of arterial pressure to blood flow, a general increase is found during hypothermia. The highest point in the experiments though, is not at the lowest temperature but, in the dog, is the temperature range in which the arterial pressure temporarily ceases its decline, 28-24° C. Apparently some constrictive mechanism resisting the fall in pressure is less capable of function below 24° C.

Cellular and Chemical Changes

The study of changes in the cellular components of the blood in hypothermia has been done largely by Helmsworth and his co-workers.^{7, 8} The hematocrit at reduced temperatures is elevated as is the mean cell volume. Platelet counts drop sharply. Leukopenia with an accompanying fall in total eosinophile count is also evident. As might be expected with an acute rise in mean cell volume, the mean cell hemoglobin concentration is reduced. Considering the fact that these changes in cellular elements might have untoward effects, Helmsworth⁷ studied the relationship of the degree of change to the method used for the induction of hypothermia. He found that the alterations occurring with surface cooling, as with immersion or refrigerating blankets, were the greatest. Induction by passage of blood through an extracorporeal cooling unit brought far less severe changes. A combination of the two methods gave intermediate values in all determinations.

The reports of Bigelow² and Fleming⁹ differ as to the changes in the calcium levels in hypothermia. The former reported a hypercalcemia of 15-20% in most of his determinations on dogs at 20° C. Fleming, four years later, in a larger series, could demonstrate no significant alterations from normothermic levels of sodium, magnesium, chloride, phosphate, lactate, or ketone bodies.⁹ In these same reports the in-

vestigators agreed in their finding of increased blood levels of potassium and CO₂.

Dangers In Hypothermia

From the outset of investigation in the field, it was found that the prime dangers in hypothermia lay in spontaneous disruption of cardiac function through either ventricular fibrillation or cardiac arrest.¹ At the same time it became apparent that in hypothermic induction, in dogs, fibrillation began in the 26°-20° C range with the highest incidence in the 22°-20° portion. Below 20° C the factor of arrest became the more common cause of death. Bigelow² pointed out that there was no apparent inhibition of impulse formation in the auricle and believed the cause of fibrillation to lie somewhere in the factors of increased peripheral resistance, leading to overwork, increased venous pressure, resulting in overloading, lowered coronary pressure, leading to anoxia, some undetermined electrolyte shift, or possibly some undiscovered circulating toxin. The elevated venous pressure became established as at least a contributing factor when it was found that reduction of pressure through venesection led to delay or prevention of fibrillation in a majority of cases.

A factor much more important in fibrillation than venous pressure is the alteration in blood pH. Fleming⁹ has demonstrated that if the artificial respiration applied to the hypothermic subject keeps his minute volume at approximately normal levels, the pH of the blood drops roughly 0.016 units per C° of hypothermia. He found that at 20°C the CO₂ content of the blood was 30 meq/liter as compared with a normal of 22 meq/liter. The pCO₂ showed a corresponding rise from 45 to 130 mm. of Hg. The intravenous infusion of NaHCO₃, 100 mg/kg, reduced the fall in pH to 0.009 units per C° but was no protection against fibrillation. Forced ventilation with approximately a 400% increase in minute volume gives the anesthetist control of the CO₂ levels and blood pH.¹⁰ By keeping the pH at a minimum of 7.5 and the CO₂ at a maximum of 22 meq/liter, the incidence of ventricular fibrillation is drastically reduced although not to zero.

An investigation of the question of why respiration at a normothermic level is insufficient in a hypothermic dog was made by Osborn.¹⁰ He showed that with a decrease in the temperature of the internal environment of an animal, there was a corresponding decrease in the gas-

eous transfer processes in the alveoli. This he believes to be due largely to the drop in arterial pressure. Hyperventilation does not improve arterial pressure or the efficiency of the membranes but by a greater number of respirations elevates the minute expiration of CO_2 .

CO_2 and pH Changes

In the light of the above findings it is recommended by Bigelow² and others that a state of hypocapnia be induced before the chilling process is begun. This has the purpose of rendering the subject alkalotic, giving thereby, an even greater protection against hypothermic acidosis. Osborn¹⁰ put forth an interesting, if unproven, hypothesis on this topic. He observed that in the early stages of hypothermia, there was an increased respiration and a transient decrease in pCO_2 . Osborn believes that this loss of CO_2 is accompanied by a decrease in HCO_3 ions. This, then would make the pH drop all the more immediate and precipitous. His logical conclusion from this line of reasoning is that an animal should be rendered hypercapnic before hypothermia is induced. It seems to this writer that the period of time during which Osborn claims that the pCO_2 is depressed by hyperventilation is not sufficient to allow significant depression of the bicarbonate level. This and the practical success of prehypothermic hyperventilation make that method the procedure of choice.

Swan⁶ theorized that it is a rapid change in pH rather than the absolute value that causes fibrillation. He noted that a good number of the instances of fibrillation involved in surgical procedures on the heart follow the release of the clamped off circulation. According to his view the heart continues metabolism during the clamp-off period and builds up its CO_2 level and acidity. When the clamped aorta is released the collected CO_2 is "washed" away, there is a rapid change in the pH, and fibrillation ensues.

There are conflicting reports as to the change in blood potassium and its effect on the heart. It was early noted that as temperature was reduced the blood K rose to levels of up to 20% above normal.² Later a decrease was reported.⁶ There is no real point of argument when it is noted that the early studies were done on acidotic, hypercapnic animals while the later work was performed on alkalotic hyperventilating ones. Without attempting to elucidate the mechanism, Swan states that there is a direct

relationship between blood levels of K and CO_2 . Later Montgomery¹¹ claimed that the cardiac tissue took up K during hypoventilation and in the period of arrested circulation. Sudden release of the clamped vessels and resumption causes an acute drop in cardiac K levels and the onset of fibrillation. Assuming that K and CO_2 somehow "move together" these theories of Swan and Montgomery can be easily correlated. The importance of each, however, in the causation of ventricular fibrillation is neither clear nor well established. Perfusion of the heart with KC1 has been used in efforts to stop fibrillation.¹² The results were gratifying in so far as the fibrillation was concerned but there was a high incidence of cardiac arrest in subjects so treated.

It had been assumed, in considering the problem of fibrillation in hypothermia, that some factor or factors, neural, humoral, or thermal, lowered the threshold of cardiac excitation to a point at which some otherwise harmless stimulus initiated fibrillation. Covino¹³ found that in the process of induction of hypothermia the ventricular diastolic threshold was, in some dogs, markedly depressed. These dogs died of fibrillation. A second, smaller portion of the group tested showed an initial depression of threshold, but a later sharp rise to levels above normal. These dogs did not fibrillate but died in cardiac arrest. In this same study he also discovered that the anesthetic used had some influence on the shape of the threshold curve but that in both pentobarbital and thiopental studies the division of the subjects into two types was approximately the same. Sixty to 80% had a lowered threshold, the remainder an increased one.

Threshold Studies

Pursuing the study of threshold further, Covino^{14,15} turned to determination of threshold throughout the cardiac cycle. Contrary to the teachings of most physiologists, the threshold of excitability, in a normal heart is not high during the entirety of systole and low only during diastole. There is a sudden, marked, short-lived depression of threshold during early systole corresponding to a portion of the ascending R wave on any ECG tracing. There is a similar but less marked depression just preceding the T wave. These exist in normal hearts but undergo change in hypothermia. In the hypothermic animal without hyperventilation, the depressions termed major and minor dips,

become both deeper (lower threshold) and broader (more prolonged in time). It was found¹⁶ that the changes in the dips were related to the reduction in temperature and also to acidosis. In hypothermia in which the pH is maintained at normal levels the major dip is deepened and broadened. Acidosis has similar effects on the minor dip and on the diastolic portion of the curve. It seems then, that a depression of the major dip does not lead to fibrillation but that depression of the minor dip and diastolic portion to similar levels can lead to fibrillation. This field of investigation deserves further study, both to evaluate the various anti-fibrillatory procedures and to clarify matters of basic cardiac physiology.

Hypothermia with interrupted circulation can be useful only if dangers inherent in its use are reduced or eliminated. Ventricular fibrillation and cerebral anoxia are the two major hazards. Coronary air embolus is an additional danger when certain types of surgical procedures are performed. The matter of cerebral damage has been simply handled on the experimental level by continuous slow perfusion of the carotid arteries during the clamp-off period.¹⁷ By this method with simultaneous perfusion of the coronary arteries, the safe time for interruption of circulation has been extended to approximately thirty minutes. If this is clinically applicable it will make possible such procedures as repair of ventricular septal defects, which have been seldom attempted to this time.

The early attempts at reduction of the incidence of ventricular fibrillation in hypothermia were directed toward the prevention of acidosis (see above). The success obtained was largely on dogs whose hearts were left untouched or had only the smallest amount of surgery performed. Fibrillation is more likely to occur in hearts that have been manipulated or operated upon, and suturing of the interventricular septum seems to be the most dangerous procedure.¹⁸

Various drugs have been experimented with, in attempts at the prevention of fibrillation. Two systemic drugs were tested¹⁹ and found to be of no value. Dilantin® sodium was administered and the heart was slowed and fibrillation prevented. However, the subjects invariably died in cardiac arrest. Procaine amide, if given in one large dose is fatal but if in multiple small doses there is some degree of protection

against fibrillation. There were a number of unexplained deaths in the procaine amide series that make its usefulness questionable.

Attempts have been made to eliminate ventricular fibrillation by perfusing the coronary arteries with vagus-simulating drugs, prostigmine and acetylcholine.^{11,12} These drugs seemed to give some degree of protection against fibrillation but there were undesirable side effects. The rate of the heart was markedly depressed and in most cases there was a decided difficulty in returning the organ to normal function. It was found in these studies that perfusion was followed by a loss of potassium from the cardiac muscle as determined by A-V difference. Following the theory of Montgomery mentioned above, this would give protection against fibrillation through a slow steady loss of potassium rather than a sudden precipitous drop.

Blockade of the sino-auricular node has presented gratifying results. Sub-epicardial injection of procaine was demonstrated to prevent fibrillation in almost all cases.^{12,18,20} The procaine was injected until the ECG showed alteration of the P wave indicating paralysis of the sino-auricular node.¹⁸ The best results to date have been obtained with systemically administered Ambonestyl.*²¹ With the use of this drug there were no cases of fibrillation, and pulse and ECG changes were minimal. In two cases cardiac hypoxia led to death or damage. The author suggests that the temperature used (25°C) was not low enough to protect against hypoxia during the 15 minute surgical procedure performed. With guarded enthusiasm, this drug may be regarded as a possible solution to the problem.

In procaine block studies it was noticed that injection of saline in control animals gave a small but repeatable degree of protection.¹⁸ It was assumed that there could be, through sub-epicardial pressure on the auriculo-caval junction, some interference with the extrinsic nerve supply of the heart. Studies of the effect of the extrinsic nerves on fibrillation^{11,22} revealed a definite correlation between extrinsic nerve activity and fibrillation. Vagal stimulation had the same effect as the administration of acetylcholine and prostigmine and was attended by the same hazards, a reduction of pulse rate and a difficulty in restoring the heart to normal function. Total cardiac sympathectomy was demonstrated to give complete protection against fibrillation. Systemic use of a sympathetic

ganglion blocking agent gave protection in the great majority of cases. Vagotomy tended to increase the incidence of fibrillation but as mentioned above vagal stimulation shows some effectiveness. Complete denervation of the heart will protect about 60% of the animals. The interpretation of these findings is that temperature reduction, which has been clearly shown to depress neural activity,²³ has a differential effect on the sympathetic and parasympathetic innervation of the heart. It is assumed that the vagal fibers are more rapidly depressed as the temperature falls and that the resulting neural imbalance sets the stage for ventricular fibrillation.

Coronary Air Embolus

Coronary air embolus enters the picture when the left ventricle is opened or when the right is opened in the presence of an interatrial or interventricular septal defect. The embolus usually occurs at the time of release of the clamped aorta.²⁴ Reclamping of the aorta, vigorous massage, and "milking" of the vessel containing the air bubble are usually sufficient to reestablish the affected circulation.

In those cases in which fibrillation occurs, the following sequence of therapeutic attempts is judged the best.⁵ Vigorous massage, shock with 170 volt defibrillator, coronary perfusion with KC1, shock again. A desperation measure is injection of adrenalin with further shocking. This whole series is performed while the patient or subject is being rewarmed as quickly as possible.

Summary

The physiologic changes which occur in the hypothermic state are many. Most important, oxygen consumption is reduced without damage. Cold narcosis occurs, respiratory efficiency is markedly reduced and respiration ceases altogether. There is a mild reduction of plasma volume and an increase in the circulating red cell mass. There is depression of all other cellular elements. There are no marked changes in electrolytes other than CO_2 and K. These rise and fall together and are dependent on the degree of hyperventilation used during the hypothermic period. The pH of the blood is dependent on the CO_2 retention.

The dangers encountered in hypothermia are largely cardiac. Ventricular fibrillation outweighs cardiac arrest as a potential hazard. Both humoral and neural factors appear to be existent in the causation of fibrillation. The

humoral factors are circulating hydrogen ion, and, probably, rapid change in the levels of K and CO_2 in the cardiac tissue and the immediately adjacent fluids. The neural portion of the etiology of ventricular fibrillation is apparently an imbalance in the sympathetic and parasympathetic innervations.

In practical application, the humoral factors can be controlled through hyperventilation of the subject. The demonstrated extrinsic neural factor can be controlled by the use of sympathetic ganglion blocking agents. The probable, but not clearly elucidated, intrinsic neural factor, as well as the extrinsic, may now be controllable through use of the new drug Ambonestyl. Experimentation on this compound is not sufficient at this time.

According to Swan⁵ and others^{25,26} general hypothermia has become a safe procedure which adds to cardiac surgery the all important element of direct vision. The hazards, though very well controlled, are still present and further work is being done in an effort to completely eradicate them.

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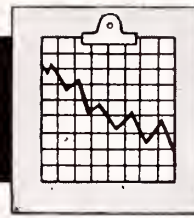
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CASE DISCUSSIONS

From The
University of Louisville Hospitals



LAENNEC'S CIRRHOSIS WITH PORTAL HYPERTENSION

Louisville General Hospital

History*

M. G., age 38, was admitted on January 18, 1955, with diagnosis of peripheral neuritis and Laennec's Cirrhosis. She had vomited small amounts of blood for seven months, and alcoholic intake had been excessive for five years. Serum albumin was 3.1; serum globulin 3.5; cephalin flocculation 3+; and thymol turbidity 9.2 Units. Upper G.I. study, including the esophagus, was reported as normal. The patient was discharged on January 31, 1955, on a diet and vitamin therapy.

On November 26, 1956, she was readmitted after vomiting large amounts of bright blood for four days. Blood pressure was 118/69 and pulse was 120/minute. Hemoglobin 4.25 Gm. The patient received 4,500 cc of whole blood the first 24 hours of hospitalization, then stopped bleeding. Prothrombin time was 48% of normal. Serum albumin was 3.4, and serum globulin 3.5. Upper G.I. study done on November 28, 1956, two days after admission, was reported as normal. Upper G.I. study was repeated on December 3, 1956, and esophageal varices were demonstrated. She was advised to have surgery but refused.

On January 3, 1957, convinced of the need of further treatment, she was readmitted.

Physical Examination

Blood pressure 120/70; pulse 70 and regular; temperature 98.6. The patient was a well-developed, rather obese, white female in no distress. Skin was normal. Positive findings included a liver palpable 4 finger-breadths below the costal margin, smooth, with a rather sharp edge; the spleen was palpable 3 finger-breadths below the costal margin and tender. No evidence of ascites. Rectal examination revealed internal-external hemorrhoids.

Hemoglobin 10.2 grams; Prothrombin time 60% of normal. Serum albumin 3.7 grams; serum globulin 4.0 grams; serum bilirubin 0.6

mgm. %. Bromsulphalein 30 minutes—21.4% retention, 60 minutes 16.7% retention. Cephalin flocculation 1+. Thymol turbidity 0.6 units.

Hospital Course

Preoperatively she received a high carbohydrate, high protein, low fat diet, Vitamin K, and 1,000 milliliters of whole blood. On January 11, 1957, she was operated upon. The liver was enlarged, firm, with many fine granular nodules. Portal vein pressure was 340 mm. of water. The gall bladder contained numerous small stones. The liver was biopsied. A side-to-side shunt between the portal vein and vena cava was done and a cholecystectomy performed. Prior to closure of the abdomen, portal pressure was recorded as 240 mm. of water.

Histopathology of the removed specimens was interpreted as portal cirrhosis, chronic cholecystitis and cholelithiasis. The patient's course was uneventful. She was discharged from the hospital on January 19, 1957.

On March 17, 1957, an upper G.I. study, with particular reference to the esophagus, was reported as normal. Hemoglobin was 12.9 grams; serum albumin 3.0; serum globulin 2.9. Prothrombin time was 30% of normal. There was evidence of ascites and pedal edema. The patient was placed on a high carbohydrate diet, vitamins, and diuretics. Her pedal edema and ascites are now minimal. She is clinically asymptomatic.

Discussion

HAROLD E. KLEINERT, M.D., Assistant Professor of Surgery: Portal hypertension is believed to develop as a result of obstruction to portal blood flow. This obstruction may be prehepatic or hepatic. Clinically, portal hypertension is manifested by splenomegaly and the formation of abnormal venous collateral channels, the most dramatic and the most dangerous, of course, being the esophagogastric varices.

Increased portal pressure and esophageal

*Patient Protocols: Hospital No. 12431.

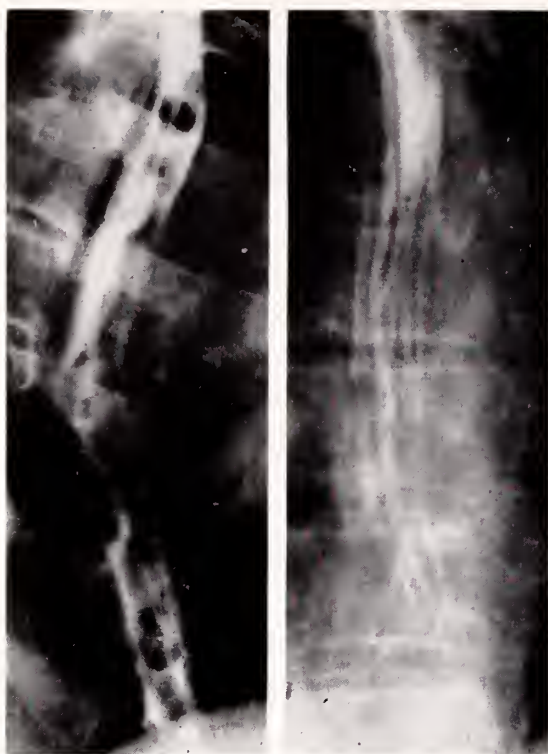


Figure 1. (left) Preoperative esophagogram demonstrating esophageal varices. (Nov. 28, 1956)

Figure 11. (right) Normal postoperative esophagogram. No varices are demonstrated. (Jan. 29, 1957)

varices accompany Laennec's Cirrhosis only part of the time. Other causes of portal hypertension and subsequent esophageal varices are hepatic parasitic infestations, viral hepatitis, extrahepatic portal block due to tumors, thrombosis of the portal vein, mesenteric pylephlebitis, and cavernomatous transformation of the portal vein.

Even though a patient with cirrhosis suffers a massive upper gastrointestinal hemorrhage, the physician must keep in mind that hemorrhage may be from a gastroduodenal ulcer rather than varices. In these cases esophageal tamponade may be an invaluable diagnostic aid.

All of our patients with severe upper gastrointestinal hemorrhage routinely have a bromsulphalein test performed as an emergency. Upper gastrointestinal X-rays have also been helpful in determining the bleeding site.

Once the hemorrhage is controlled, and the patient's condition improved to a point where major surgery can be tolerated, some form of portal to systemic vein shunt must be considered.

Splenectomy for several years was a popular method of treating portal hypertension. Omentopexy and various other procedures such as arterial ligation to decrease the amount of blood entering the portal system were employed, with similarly poor results. In 1945, Whipple, Blake-more and Lord significantly lowered portal vein pressure by a modification of the Eck fistula. Since then, numerous patients have been protected from fatal hemorrhage by the portocaval or spleno-renal shunt or some modification of these types of shunt.

Question: What are the indications for portal systemic vein shunt?

Dr. Kleinert: Bleeding esophageal varices are lethal. Most patients will die within one year of their first bleeding episode if the portal hypertension remains untreated. Any patient with bleeding esophageal varices who has reasonably good liver function should be considered as a candidate for a shunt.

Question: What do you consider good liver function?

Dr. Kleinert: A serum albumin level of over 3 grams per 100 milliliters, a serum bilirubin below 4 mg.%, and prothrombin time over 50% of normal. Bromsulphalein retention, ideally, should be less than 15% in 60 minutes.

Question: Are there any contraindications to portal venous shunt?

Dr. Kleinert: Yes. The patient who has both ascites and hemorrhage is likely to have severe liver damage. The results of shunt for hemorrhage have been excellent, whereas the results for treatment of ascites has been poor. Preferably, a patient who has bled and has ascites should be treated in the hospital with diet, vitamins and diuretics. If the ascites diminishes or disappears and liver function appears to be adequate, the patient may be a candidate for a shunt. A patient with rapidly progressing cirrhotic disease as evidenced by continuing rise of serum bilirubin, elevation of thymol turbidity and cephalin flocculation and decrease in prothrombin time while receiving Vitamin K, should not be considered as a candidate for shunt.

Question: Is the course of the cirrhosis altered by a shunt?

Dr. Kelinert: There is no evidence to indicate that cirrhosis will be improved by performance of a shunt.

Question: As an emergency procedure will a shunt control bleeding from esophageal varices?

Dr. Kleinert: We routinely try to control bleeding from esophageal varices with a double balloon tube to tamponade the cardia of the stomach and the lower esophagus. If this does not control the bleeding, then transesophageal ligation of the varices is performed. The results of this operation have not been good, for these patients frequently expire with liver failure. Other methods of treating uncontrolled bleeding from esophageal varices likewise are rather unsuccessful. These include extirpation of the lower esophagus and stomach and mediastinal packing. We have not employed portal caval shunt as a means of treating uncontrolled bleeding from esophageal varices. Ordinarily these patients are in poor condition for a major operative procedure and the simplest thing possible should be performed to control bleeding. A shunt ordinarily requires an operative time of some four hours.

Question: Do you prefer a particular type of shunt?

Dr. Kleinert: The type of anastomosis to be performed must be decided for each individual case. The patients with cavernomatous changes of the portal vein or active splenomegaly should have a spleno-renal shunt. Ordinarily for Laennec's cirrhotoses, a side-to-side portal caval shunt is employed. If there is some question concerning the presence of an adequate splenic or portal vein, then a preoperative spleno-portogram is a valuable aid. We have not performed a spleno-portogram as a diagnostic aid except immediately prior to operation because of the danger of splenic rupture and hemorrhage.

Question: What results are obtained with shunt operations?

Dr. Kleinert: The results are excellent in patients with bleeding esophageal varices whose liver function tests are adequate. The mortality and morbidity among these are very low.

Question: Of what value is emergency examination of the upper gastrointestinal tract by x-ray in patients with known gastrointestinal hemorrhage?

EVERETT L. PIRKEY, M.D., Professor and Chairman, Department of Radiology: Emergency upper gastrointestinal tract examinations can be of considerable value inasmuch

as a positive finding of either varices, ulcer or cancer will suggest the necessary method of therapy. It may be of some value as well in ruling out certain other conditions that could produce hemorrhage. In many institutions it is only the very occasional case that receives an emergency upper gastrointestinal study and like any medical procedure that is not done often, it can be very unreliable, mainly due to lack of experience on the part of both the radiologist and the attending physician. I feel very strongly that if this procedure is to be done at all, it should be done at every opportunity, so that the attending physician and the radiologist may develop facility in the procedure and learn to act as a "well-oiled" team.

The source of bleeding should be found in at least 50% of all the cases examined. The better the selection used for the patients examined, the better the percentage of positive findings. However, if the percentage of positive findings reaches anywhere near 100%, then the method of selection is entirely too selective. A gastric tube in place prevents us from examining the esophagus properly. Therefore, in those patients in whom cirrhosis is suspected, we always, near the end of the examination, remove the gastric tube from the esophagus and have the patient drink a small amount of opaque material. During the swallowing of the opaque material we then have the patient perform the classic Valsalva maneuver of attempted expiration against the closed glottis. This should be repeated several times inasmuch as the bolus of barium may or may not be in the proper area at the time of the Valsalva maneuver.

Varices are quite fleeting in appearance as one might expect when one recalls they are just thin-walled venous channels and a large bolus of barium in the esophagus may well erase them during deglutition. The esophagus should always be examined with the patient in the recumbent position; it is almost impossible to find varices in patients who are erect, for if the patient is upright one cannot expect complete filling of the venous channels.

Summary

In summary, upper gastrointestinal examination by means of X-ray in cases of hemorrhage can be of considerable value if it is done frequently enough by experienced personnel under standard conditions with the patient recumbent when esophageal varices are suspected.



EDITORIALS



MEDICAL PERIPATETICS—LONDON TO LOUISVILLE

WHEN the Medical Color Television Unit sets up its cameras in Louisville for the KSMA Annual Meeting September 17-19, it will mark the 110th convention the unit has covered. It also will mark the first show in the United States after a summer-long schedule in England which included five major medical meetings.

Some of the statistics behind both facts are rather impressive. It was only eight years ago that the Medical Color Television Unit was established by Smith, Kline & French Laboratories; yet in that time, the unit has televised 800 operations of every type and presented more than 1200 "dry" clinics. A survey of 1000 doctors shows that 98.4 per cent favor including color TV in meeting programs; 84 per cent would rather watch surgery via television than view it in the amphitheater, and 81 per cent prefer televised clinics to platform or auditorium presentations.

That the SKF crew was invited to televise such meetings in England as the British Medical Association, the Harvey Tercentenary Congress, and the joint meeting of the Royal College of Surgeons with the Academie de Chirurgie de Paris indicates the degree of acceptance which closed-circuit medical television has received even in medical circles which are regarded as highly conservative.

What are the reasons for this acceptance? The first answer, we believe, stems from a dilemma inherent in the teaching of modern-day surgery. The new surgical techniques require an ever-increasing number of specialists in the operating room. It is not uncommon to find eight or more persons in the immediate vicinity of the table: the operator, his assistants, the anaesthetist and his colleagues, the instrument nurse, scrub nurses, perhaps a cardiologist—the number grows. It is thus almost impossible for an observer in the operating suite or amphi-

theater to obtain a satisfactory view of the surgical field. Yet the teaching of surgery, whether to students or to graduate physicians, depends on direct observation.

Only color television solves this dilemma. A television camera can either be focused directly above the operating field, or a mirror can be positioned in such fashion that the image can easily be scanned by the camera. Not only is the surgical view unobstructed for hundreds to see, but by means of a small microphone fixed to his gown, the surgeon can comment as he works. Further, most surgical techniques as presented by the SKF unit are televised in coordination with a panel of surgeons and physicians in another location. Lastly, a moderator is stationed in the auditorium so that three-way communication—surgeon with panel with auditorium—is established.

The second value of color television stems from the impact that the medium's very reliance on the visual gives to lectures and demonstrations. Charts, diagrams and slides are used extensively. The camera roams from visual material to the speaker and back again as interest dictates. What might be static from the lectern becomes dynamic on TV.

There is still a third value to color television for convention presentations. It is programming. Because the arrangements for color TV are left entirely in the hands of the state or national medical association, each convention can tailor the program to its special needs.

In Louisville, the program was especially designed to provide a wide variety of subjects—abdominal surgery, obstetrics and gynecology, urology, dermatology, and psychiatry.

The British Medical Association program, which immediately preceded the Louisville show, was also general. But when the SKF crew leaves Louisville, it will head for Atlantic City and the American College of Surgeons' Clinical Congress, and naturally, the emphasis will be on surgery.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

Particularly for physicians from rural areas, whose opportunities to participate in post-graduate medical seminars are limited, this year's program will prove especially valuable. Not only will they be seeing a wide range of

medical and surgical subjects presented by many of the State's leading authorities, but they will be viewing these presentations on a medium that has gained stature in its medical peripatetics.

BREAD UPON THE WATER

THERE appeared recently in our daily paper a story of considerable interest and significance. A number of years ago, during the depression, Doctor John T. Bate of Louisville did an appendectomy for a gentleman who was then a resident of Louisville. A very minimal charge was made because of the general financial pressures of the time and because of the patient's personal economic status.

It appears that very recently the patient, who had prospered, remembered the kindness and consideration shown him by Doctor Bate and sent him an additional fee of \$100. The surgeon was most grateful for this long deferred appreciation and its substantial expression, and in turn contributed the full amount to the Helen Vincent Memorial Fund for the purpose of nurse education.

Almost any physician who has practiced for many years has experienced some similar type

of gratitude expressed by patients, either in payment of a long forgotten bill, an increase in the amount of a fee, or reimbursement for services which were at first rendered gratis. Such occurrences do not ordinarily make headlines. They are accepted as a part of the cordial relationship of good will between the physician and his public.

It is none the less refreshing to know that charity, compassion and consideration have always been and will continue to be a fundamental part of every good physician's daily practice; and it is equally inspiring to know that ordinary people are still appreciative and ready to respond in kind to a physician's good will and service beyond the call of duty. The practice of the Golden Rule will produce better public relations than all the artificially devised means and counseling that can be bought.

Sam A. Overstreet, M.D.

EXPLORE THE FRONTIERS

YOUR Annual Meeting offers the only large scale opportunity in the State to learn about the newest therapeutic products, medical literature, equipment and services available to you and your patients.

Professional service representatives of the nation's leading pharmaceutical and surgical houses will be exhibiting the very latest products, services and literature available to the medical profession.

This opportunity for a meeting on common ground with service representatives of research houses, can prove a valuable contribution to your practice of medicine. Since correct diagnosis can be followed by correct treatment *only* if you're familiar with the very best therapeutic agents available, the greater knowledge of the newer drugs, equipment and services you gain at the technical exhibits will inevitably lead to better medical care for your patients.

Long an important educational feature of the meeting, the technical exhibits represent a

valuable addition to the post graduate medical education program. They condense an encyclopedia of ideas, and present them graphically, enabling you to grasp in a matter of minutes what might otherwise take hours of reading time.

Careful screening by the Committee on Technical Exhibits assures you that the technical exhibits depict those services and products that bear a close and ethical relationship to the practice of medicine.

You owe it to yourself, your patients, and the medical profession to take advantage of this opportunity to increase your knowledge of the products, equipment, and services that may help you to alleviate some of the ills of mankind.

Be sure to check your program for the times set aside for visiting exhibits, bring a "want" list of your needs, and make this your year to explore the frontiers of pharmaceutical and surgical research by visiting KSMA's 65 technical exhibits!



ORGANIZATION SECTION



A view of KSMA's new headquarters at 1169 Eastern Parkway taken while construction work was still in progress.

Move to Medical Arts Building On August 2

Glendale 4-6324 will be the telephone number of the new KSMA headquarters office in the Medical Arts Building, 1169 Eastern Parkway.

As the Journal goes to press, the staff of the Headquarters Office is scheduled to move Friday, August 2 into the new office building which will house ninety physicians, several agencies and stores.

Woodford B. Troutman, M.D., Louisville, Secretary of the Association who made the announcement, suggested that members of the Association would want to make a note, both of the new address which is the Medical Arts Building, 1169 Eastern Parkway and the phone number which is GLendale 4-6324, for future reference.

Doctor Troutman said all KSMA members were cordially invited to inspect the new headquarters office as soon as possible.

Blue Shield Kenlake Seminar Slated for October 3

"Blue Shield—the Answer to Third Party Medicine" will be the subject of a talk by L. Howard Schriver, M.D., Cincinnati, one of the two nationally known authorities who will speak at the Blue Shield Seminar at the Kenlake Hotel, Hardin, Kentucky, Thursday evening, October 3.

Physicians from the first, second, third and sixth Councilor Districts are invited to attend the meeting at the popular Kentucky Lake resort by J. Duffy Hancock, M.D., Louisville, president of the Kentucky Physicians Mutual which is the Blue Shield Plan for Kentucky.

The other feature speaker will be Oscar O. Miller, M.D., Louisville, who will discuss the "Kentucky Physicians Mutual and YOUR FUTURE."

"This program is being held to facilitate a greater understanding of the contributions to, and the im-

portance of the Kentucky Physicians Mutual to the physicians and people of Kentucky," said Doctor Hancock. The seminar which has the support and active approval of the Executive Committee of the Association, will give physicians at the local level an opportunity to ask any questions on this matter.

Councilors J. Vernon Pace, M.D., Paducah, First District; Walter O'Nan, M.D., Henderson, Second District; Ralph D. Lynn, M.D., Elkton, Third District; and L. O. Toomey, M.D., Bowling Green, Sixth District, urge the members of their districts to attend the seminar.

Eight New Members Appointed To Board of Consultants

Eight new members of the Board of Consultants on Scientific Articles of The Journal of the KSMA have been appointed effective July 1 by the editor and the advisory committee to the editor, according to Guy Aud, M.D., Louisville, editor.

The new consultants are: John P. Bell, M.D., Louisville; John Dickinson, M.D., Glasgow; James B. Douglas, M.D., Louisville; Frank L. Duncan, M.D., Monticello; Ullin W. Leavell, Jr., M.D., Lexington; Francis M. Massie, M.D., Lexington; C. Pittman Orr, M.D., Paducah; Merrill W. Schell, M.D., Owensboro.

The board is composed of 24 members, eight of whom retire each year after serving three-year terms. The retiring members this year are: Cary C. Barrett, M.D., Lexington; Joe M. Bush, M.D., Mt. Sterling; Allen E. Grimes, M.D., Lexington; Richard F. Grise, M.D., Bowling Green; Billy K. Keller, M.D., Louisville; A. J. Miller, M.D., Louisville; Robert L. Reeves, M.D., Paducah; Charles R. Yancey, M.D., Hopkinsville.

Doctor Aud expressed appreciation for the fine contribution the retiring consultants have made during the past three years in the interest of a better Journal.

To Discuss Diseases of Chest at Symposium Sept. 4

"Diagnosis of Carcinoma of the Lung" will be the featured scientific topic at the Symposium on Diseases of the Chest at District One State Tuberculosis Hospital at Madisonville, Wednesday evening, September 4.

The scientific presentation will be made by Rollin A. Daniel, M.D., professor of clinical surgery at Vanderbilt University, Nashville; and Hollis E. Johnson, M.D., associate professor of clinical medicine at Vanderbilt.

Program was planned by A. B. Dickey, M.D., medical director and superintendent, State Tuberculosis Hospital, Madisonville; Kenneth L. Barnes, M.D., Princeton, education committee representative, Kentucky Academy of General Practice; and Loman C. Trover, M.D., Madisonville, KSMA representative, committee on postgraduate education.

Two U of L Student Papers Published in Journal

To inform members of the medical profession of the high calibre work of medical students, as well as to recognize student achievement, the Journal has published two articles written as term papers by junior medical students in surgery at the University of Louisville.

First article, "Carcinoid Tumors" by Alan Bornstein a graduate of Indiana who achieved the highest grade on Part I of the national board, appeared in the July Journal.

This month's issue contains the second paper, written by Theodore Lynch who graduated from Kenyon College with high honors. His paper is entitled "A Consideration of Physiologic Change in the Hypothermic State with Emphasis on Ventricular Fibrillation."

Members of the faculty were impressed with the excellence of the papers chosen for publication by the department of surgery headed by Rudolf J. Noer, M.D. Subjects were selected by the students and approved by the faculty.

KSMA gave each of the two students a one year subscription to the Journal, in recognition of their good work.

Ninety from Districts 12 and 15 Meet at Cumberland Falls

Ninety physicians and their wives attended the afternoon and evening sessions of the Twelfth and Fifteenth Councilor Districts at Cumberland Falls, Thursday, June 27.

After dinner speakers were KSMA President, Richard R. Slucher, M.D., Buechel, and William R. Willard, M.D., Vice-President, University of Kentucky Medical Center. Charles B. Stacy, M.D., Councilor for the Fifteenth District presided.

Walter S. Coe, M.D., W. M. Christophersen, M.D. and Douglas M. Haynes, M.D., all of Louisville, presented a well received scientific program. In the absence of the Councilor for the Twelfth District, Garnett J. Sweeney, M.D., Liberty, who was unable to be present, Robert E. Pennington, M.D., London, presided.

Entertainment for the wives of the physicians and the decorations of the meeting room were under the direction of Mrs. Daniel Bower, Williamsburg, Woman's Auxiliary Councilor for the Fifteenth District.

3 Receive Fellowship Certificates

Three members of KSMA received their certificates of fellowship in the American College of Chest Physicians at the Convocation in New York City on June 1.

Receiving their certificates at the best attended meeting in the history of the College were: William H. Anderson, Harlan; John B. Floyd, Jr., Lexington; and Kenneth L. Lockwood, Outwood.



Pictured at the joint meeting of the Twelfth and Fifteenth Councilor Districts in Cumberland Falls on June 27 are, standing, from left, Charles B. Stacy, M.D., Pineville, Councilor for the Fifteenth District who presided; W. Clark Bailey, M.D., Harlan, KSMA delegate to AMA; Richard R. Slucher, M.D., Buechel, President of KSMA who was one of two featured speakers; Douglas M. Hayes, M.D., guest scientific speaker; William Christophersen, M.D., guest scientific speaker; William R. Willard, M.D., vice president in charge of the University of Kentucky Medical Center and Walter S. Coe, M.D., Louisville, guest scientific speaker. Seated are, Mrs. Stacy, Mrs. Bailey, Mrs. Slucher, and Mrs. Willard. Garnett J. Sweeney, M.D., Liberty, Councilor for the Twelfth District was unable to attend.

Two Renamed to Hospital Council

C. C. Howard, M.D., Glasgow, and Hershel B. Murray, M.D., West Liberty, have been reappointed to the Hospital Licenture Council by Governor A. B. Chandler.

The council is composed of 10 members, five of whom are physicians. Each member serves three years.

Diabetes Detection Drive Set for November 10-16

The Kentucky Diabetes Detection Drive, sponsored by KSMA as a public service in cooperation with the American Diabetes Association, is scheduled for November 10-16, according to Carlisle Morse, M.D., Louisville, chairman of the Associate Committee on Diabetes.

KSMA is requesting all of its component medical societies to name a diabetes committee for local implementation of the drive. Every member of KSMA is asked to give a free urine sugar test to any person requesting it during Diabetes Week.

The 1957 drive is the seventh to be conducted by KSMA. Last year over 30,000 free tests were made with 550 positives reported.

The Diabetes Detection Drive is unique on the national, state and local level, since it involves no general fund raising and it is organized and controlled by members of the medical profession.

Members serving with Doctor Morse on the KSMA Associate Committee on Diabetes are: Harold K. Bailey, M.D., Ashland; George Philip Carter, M.D., Louisa; Marcus A. Coyle, M.D., Springfield; Thomas J. Crume, M.D., Owensboro; Robert J. Hoffman,

M.D., Fort Mitchell; Elmo K. Hughes, M.D., Pleasure Ridge Park; Albert H. Joslin, M.D., Beaver Dam; Franklin B. Moosnick, M.D., Lexington; and Stanley T. Simmons, M.D., Louisville.

Reports on Progress at U. K. for New Med Center

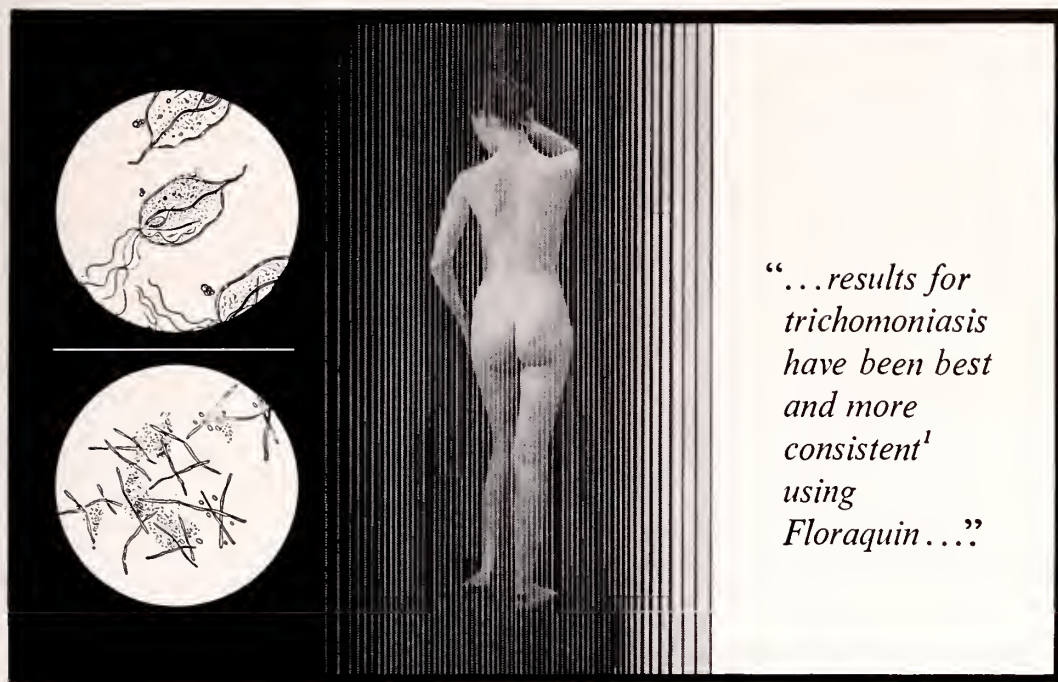
Architectural planning for the new Medical Science Building at the University of Kentucky is virtually complete, with working drawings, which will probably be ready for bids in September, being checked, according to William R. Willard, M.D., Lexington, vice president of the Medical Center.

The preliminary drawings for the rest of the Center are nearly complete. After approval by the Department of Finance, the drawings will be turned over to Meriwether, Marye, and Associates for translation into working drawings.

In the course of planning, the Medical Center staff has visited many treatment and educational facilities within the state as well as the following out of state universities: Ohio, Indiana North Carolina, Florida, Alabama, Mississippi, Arkansas, Texas, Missouri, Michigan, Minnesota, New York, Harvard, Yale, Chicago, Columbia, and Cornell. Experts in various fields have come to Lexington to consult with the Medical Center staff and architects.

Chief librarian for the Medical Center Library has already been chosen. Alfred Brandon, librarian at the College of Medical Evangelists at Loma Linda, California, will work part time until fall when he will come to Lexington full time.

Elsewhere in this issue you will find a listing of the advisory committee to the new College of Dentistry which held its first meeting on July 10.



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1. Pitt, M. B.: Leukorrhea. Causes and Management, J. M. A. Alabama 25:182 (Feb.) 1956.

2. Parker, R. T.; Jones, C. P., and Thomas, W. L.: Pruritus Vulvae, North Carolina M. J. 16:570 (Dec.) 1955.

SEARLE

Conduct Maternal Mortality Study To Reduce Deaths in State

A study aimed at lowering the maternal mortality rate is currently being conducted by KSMA's Associate Committee for the Study of Maternal Mortality, headed by Edwin P. Solomon, M.D., Louisville.

As part of the study, which is already underway, attending physicians are asked to make every effort to obtain an autopsy and to fill out a detailed questionnaire for every death occurring during or within six months of pregnancy. The doctor is then interviewed by a member of the Committee, who also fills out a report.

When six deaths occur, the reports will be studied by the Committee to discover the cause of death whenever possible. An annual report will be made to KSMA members.

Each case will be given a code number, and all names will be removed from the report to assure anonymity for both patients and physicians.

Doctor Solomon stressed the fact that the primary purpose of the committee is to aid in decreasing the maternal mortality rate, which has already been reduced markedly in recent years because of better education of both the public and the physicians, more favorable conditions for delivery, availability of replacement blood, and antibiotics.

He emphasized that the study will not jeopardize any physician's standing in any way.

Any physician receiving the questionnaire is requested to cooperate with the committee which, besides Doctor Solomon, includes: Robert Bateman, M.D., O. H. Fearing, M.D., Helen B. Fraser, M.D., (ex-officio), Robert F. Monroe, M.D., W. H. Parker, M.D., Russell E. Teague, M.D. (ex-officio), and James A. Ward, M.D.

American College of Surgeons to Meet October 14 - 18

Daniel C. Elkin, M.D., Lancaster, will retire as president of the American College of Surgeons at the College's forty-third clinical congress which will meet in Atlantic City, New Jersey, October 14-18.

Theme of the Congress, which more than 10,000 are scheduled to attend is progress in surgery as it is emerging from research laboratories and operating rooms. More than 1,000 are taking part in the various programs as authors of research reports, lecturers, leaders of symposia, participants in panel discussions, and operating surgeons in motion pictures and closed circuit TV.

On the final evening, October 18, initiates will be presented for Fellowship, honorary fellowships conferred, and officers inaugurated.

U of L Medical Alumni Fund Report

Nine hundred and sixty medical alumni of the University of Louisville donated a total of \$31,000 to the school's alumni fund from January to mid-July of this year, according to Leslie Shively, director of alumni relations at the university.

Jefferson County Society Moves

The Jefferson County Medical Society has moved its offices to the new Medical Arts Building, 1169 Eastern Parkway, according to announcement by John S. Harter, M.D., president. Its new telephone number is GLendale 4-4621.

Formerly located at 981 South Third Street, the society and its affiliated Medical Society Business Bureau were the first tenants in the new \$1,200,000 building.

Blue Cross Improves Service With New Wire System

D. Lane Tynes, executive director of Blue Cross Hospital Plan Inc., Louisville, announced recently that the Kentucky organization has become a member of the first international private-wire communications system designed for use in reporting admissions of hospital patients.

The high-speed, 18,000 mile system connecting 86 cities is leased from Western Union. It will handle authorizations for service to Blue Cross members away from home cities and for dependents of servicemen under the Medicare program where Blue Cross is acting as agent.

The network will reduce to minutes the transmission time required to notify any local Blue Cross office of the admission of one of its subscribers to an out-of-state hospital. It will also provide economies in the operation of this program known as the Inter-Plan Service Benefit Bank.

Ohio Meeting Offers 12 Credits

The Ohio Academy of General Practice will hold its seventh annual scientific assembly at the Franklin County Veterans Memorial in Columbus on September 18-19. The scientific program will give members of the American Association of General Practitioners 12 hours of post graduate credit.

Kentucky and Tennessee GP's At Kenlake Seminar

One hundred and fifty Kentucky physicians and their wives and 40 physicians from Tennessee attended the fourth annual Kenlake Seminar at the Kenlake Hotel, Kentucky Lake, on July 11.

Thornton E. Bryan, Jr., M.D., Cadiz, arranged the program of the seminar, which is sponsored by the Kentucky and Tennessee Academies of General Practice.

Speakers at the seminar were: Harvel E. Wilson, M.D., University of Tennessee; Robert A. Lennox, M.D., Tulane University; Robert Chalfant, Vanderbilt University; George W. Pedigo, Jr., M.D., University of Louisville; and Carlton R. Smith, M.D., Peoria, Illinois.

16 Dentists on Advisory Committee for U of K's New College

Sixteen dentists have been named to the advisory committee for the University of Kentucky's new College of Dentistry.

Announcement of formation of the committee was made at an organizational meeting on July 10 by William R. Willard, M.D., vice president of the Medical Center. He said the University is presently seeking a dean for the Dental College.

Dentists on the committee include: H. R. Cady, Glasgow; P. W. Evans, Ashland; S. W. Francis, Hazard; W. B. Harris, Somerset; C. T. Kirk, Owensboro; C. H. Jagers, Princeton; D. M. McFadden, London; T. H. Schuler, Covington; A. H. Tittsworth, Murray; L. B. Wagers, Lexington; and J. J. Wheat, Bardstown.

Members of the dental profession serving in an ex-officio capacity are: Raymond Myers, dean of the College of Dentistry, University of Louisville; A. B. Coxwell, secretary-treasurer of the State Health Department; John J. Kelly, Franklin, president of the Kentucky State Dental Association; and Robert P. Thomas, Louisville.

Heart Associations Aid Research by State-wide Grants

Largest single grant of the nearly \$80,000 earmarked for research by five Kentucky Heart Associations goes to the chair of heart research at the University of Louisville Medical School.

This grant of \$15,300 finances the work of Joseph P. Holt, M.D., professor of heart research who is studying the ventricles of the heart and the flow of blood through the veins.

Other research grants made by the Kentucky association and its chapters include \$11,300 for 13 student scholarships to the University of Louisville and research grants to Kentucky physicians. Chief non-research grants go to heart clinics throughout the state.

Doctor Holt was also one of four faculty members of the University of Louisville to receive research grants totalling \$15,169 from the American Heart Association. Others receiving grants from the national association were: R. Duncan Dallam, M.D., assistant professor of bio-chemistry; Maurice M. Best, M.D., and Charles H. Duncan, M.D., assistant professors of medicine who are conducting a joint study.

Renowned Surgeons at ICS

World-renowned surgeons from five continents will be featured on the scientific program of the twenty-second annual Congress of the U. S. and Canadian Sections of the International College of Surgeons at the Palmer House in Chicago, September 8-12.

Announcement of the meeting was made by Max Thorek, M.D., Chicago, founder and international secretary of the College.

Relates Campbell-Kenton History

"The History of the Campbell-Kenton Medical Society" was the subject of a paper read by Alvin C. Poweleit, M.D., Covington, at the June meeting of the Christopher Gist Historical Society in the Covington Public Library.

Doctor Poweleit traced the beginnings of medical practice in Campbell and Kenton Counties from Thomas Hinde, M.D., a distinguished figure in colonial America who was personal physician to Patrick Henry of Virginia.

30 U. of L. Graduates Licensed To Practice Medicine

Thirty graduates of the University of Louisville School of Medicine of the class of 1956 have been granted licenses to practice medicine in Kentucky, according to announcement by Russell E. Teague, M.D., secretary of the State Board of Health.

The list of new physicians follows:

James E. Alvey, Jr. Lebanon Junction	John K. Kirksey Paducah
Mary M. Anderson Children's Hospital Louisville	Kenneth E. Lanter Florence
James N. Blackerby V. A. Hospital Louisville	Russell S. Long Frankfort
James H. Bondurant Murray	Bacon R. Moore, III Harrodsburg
Winston L. Burke Corbin	Charles W. Nelson, Jr. Memorial Medical Center Williamson, W. Va.
John C. Burris Morgantown	Charles E. Peck Russell Springs
Charles B. Carty Richmond	Charles L. Price Hartford
William F. Chumley Hartford	Robert L. Reid Frankfort
Charles P. Davis Louisville	Nelson B. Rue, Jr. Bowling Green
James W. Dorton Louisville	Robert M. Runge South Fort Mitchell
Ronald G. Fragge Covington	Paul R. Smith Pineville
Kenneth P. Haywood Madisonville	Virginia A. Stevens St. Joseph Infirmary Louisville
LeRoy C. Hess Covington	Elvis R. Thompson Stone
Arthur H. Isaacs St. Joseph Infirmary Louisville	William P. Vonderhaar Vine Grove
Carroll A. Jansen Covington	Lewis E. Wesley, Lexington

Logan Mahaffey, son of Hugh Mahaffey, M.D., Richmond, was one of five students who received the Mosby Book Award for 1957 at the University of Louisville School of Medicine.

Diabetes is Symposium Subject

KSMA members in eastern Kentucky will want to attend the annual symposium of the Cabell County Medical Society at the Hotel Prichard, Huntington, West Virginia, On Thursday, September 12. This all-day event for physicians in the tri-state area, will feature four outstanding authorities in the field of Diabetes. It is scheduled to start at 9 a.m. and conclude in the evening with a cocktail party.

Immunization Booklet Issued

The U. S. Public Health Service has issued a supplement to the booklet, "Immunization Information for International Travel," listing changes made in immunization requirements since the release of the booklet in June, 1956, to March 1, 1957. Copies of the supplement are furnished free of charge for copies of the booklet on hand. They may be obtained from the Epidemiology and Immunization Branch of the Division of Foreign Quarantine, U. S. Public Health Service, Washington, 25, D. C.

Heart Association to Meet in Fall

The 30th Scientific Sessions of the American Heart Association commemorating the 300th anniversary of the death of William Harvey, English scientist who discovered the circulation of the blood, will be held in Chicago at the Hotel Sherman, October 25-28.

A scientific program, October 25, on "Prevention and Management of Cardiovascular Emergencies" will precede the regular sessions.

Mental Health Council Meets

Frank M. Gaines, Jr., M.D., Louisville, was made a permanent member of the Southern Regional Council on Mental Health Training and Research at the Council's two-day meeting in Louisville in June.

Doctor Gaines, former Kentucky commissioner of mental health who had served since 1953 as Kentucky's representative on the Council, was succeeded as Council president by Paul Harkey, Oklahoma attorney. Doctor Harold McPheeters, present State commissioner of mental health, was recently appointed Kentucky representative to the Council.

Student Scientific Paper

(Continued from Page 724)

20. Radigan, L. R., Lombardo, T. A., Morrow, A. G.: The Prevention of Ventricular Fibrillation in Experimental Hypothermia. *Surgery* 40:471-474, 1956.
21. Covino, B. G., Heghauer, A. H.: Hypothermic Ventricular Fibrillation and Its Control. *Surgery* 40:475-480, 1956.
22. Shumaker, H. B., Riberi, A., Boone, R. D., Kajikuri, H.: Ventricular Fibrillation in the Hypothermia State: IV. The Role of Extrinsic Cardiac Innervation. *Ann. Surg.* 143:216-229, 1956.
23. Rosomoff, H. L.: The Effect of Hypothermia on the Physiology of the Nervous System. *Surgery* 40:328-336, 1956.
24. Riberi, A., Kajikuri, H., Shumaker, H. B.: Ventricular Fibrillation in the Hypothermic State: III. The Management of Coronary Air Embolism and Ventricular Fibrillation. *Arch. Surg.* 72:502-507, 1956.
25. Lewis, F. J., Varco, R. L., Taufel, M.: Repair of Atrial Septal Defects Under Direct Vision with the Aid of Hypothermia. *Surgery* 36:538-556, 1954.
26. Scott, H. W., Stahlman, M., Collins, H. A.: Experiences with Hypothermia in Cardiovascular Surgery. *J. Tenn. M. A.* 47:232-238, 1954 (as Abstracted in *J.A.M.A.* 156:451, 1954).

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On Committee to Aid Aged

J. Duffy Hancock, M.D., W. Reeve Hansen, M.D., and J. C. McGuire, M.D., have been appointed members of a 15-man committee which will seek ways to improve the well-being of the aged and retired persons in Kentucky by Governor A. B. Chandler.

World Association to Meet

"Solidarity—the Key to Medical Advancement" will be the theme of the 11th general assembly of the World Medical Association which convenes in Istanbul, Turkey, September 29-October 5.

Representing more than 700,000 doctors (current membership includes 53 national medical associations), the Association is the only organization at an international level which can speak and represent the opinions of practicing doctors of the world.

Use of Prison Labor Ended

Prison laborers will no longer be used at Kentucky's state mental institutions, according to an agreement by H. L. McPheeters, M.D., commissioner of mental health, and Commissioner Charles Allphin of the Welfare Department and the Department of Finance.

Kentucky State Hospital, Danville, and Central State Hospital, Lakeland, have used prison labor for a number of years. The decision to remove the prisoners was based partially on the fact that Doctor McPheeters felt that the hospitals would benefit when many of the problems connected with using this type of labor were eliminated.

NEWS ITEMS

Charles L. Price, M.D., has become associated with Paul E. Goode, M.D., in Hartford. Doctor Price who began his practice on July 1, will also be a member of the staff of the Ohio County Hospital. A 1956 graduate of the University of Louisville Medical School, he recently completed a year's internship at St. Elizabeth Hospital in Dayton.

Fred E. Coy, Jr., M.D., a 1950 graduate of the University of Louisville School of Medicine, interned at Tampa Municipal Hospital, Tampa, Florida. He has served two years in the air corps and three years in the Army Medical Corps. Doctor Coy served his residency under the University of Louisville's Orthopedic Residency Program and has just opened an office for the practice of orthopedic surgery in Louisville.

Richard L. Roth, M.D., a native Louisvillian, has opened an office in Louisville. A graduate of the University of Louisville Medical School in 1952, he will limit his practice to neurology. He interned at Henry Ford Hospital, Detroit, Michigan, and served one year in the army. Doctor Roth took his residency training in neurology at Henry Ford Hospital and University Hospital in Ann Arbor, Michigan.

Daniel E. Mahaffey, M.D., a graduate of the University of Louisville Medical School in 1946, served his internship at Albany Hospital, Albany, New York, and Jefferson Davis Hospital in Houston, Texas. Doctor Mahaffey has started the practice of thoracic

(Continued on next page)

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(Continued from preceding page)

surgery in Louisville, having received his residency training at Baylor Affiliated Hospital in Houston, Texas. Doctor Mahaffey was clinical assistant in general surgery at the Touro Infirmary in New Orleans before coming to Louisville.

Hoyt D. Gardner, M.D., who will limit his practice to general surgery has opened an office in Louisville. A graduate of the University of Louisville Medical School in 1950, Doctor Gardner interned at Detroit Receiving Hospital and took his residency training at the Henry Ford Hospital in Detroit. He served in the navy during World War II, and as a captain in the medical branch of the Air Force during the Korean conflict.

Lawrence U. Gilliam, M.D., a native of Cumberland, is opening an office in Louisville for the practice of pediatrics. A 1950 graduate of the University of Louisville School of Medicine, he interned at St. Elizabeth Hospital in Covington. Doctor Gilliam received his residency training at Children's and General Hospital in Louisville. He served two years in the U. S. Navy.

John G. Rulander, M.D., has resumed his practice in Louisville following two years of military service with the medical corps. He was assigned to the Pentagon in Washington, D. C. Doctor Rulander, a graduate of the University of Louisville School of Medicine in 1942, interned at St. Anthony's Hospital prior to starting his general practice in Louisville.

John P. Stamer, Jr., M.D., a 1950 graduate of the University of Louisville Medical School, served his

internship at Louisville General Hospital. Doctor Stamer, who was born in Java, Dutch East Indies, is practicing thoracic surgery in Louisville. A veteran of three years service in the USAF, he took his residency training at Louisville General Hospital and University of Michigan Hospital.

Lee C. Hess, M.D., opened his office for the practice of general medicine in Florence on July 2. A graduate of the University of Louisville Medical School in 1956, he interned at St. Elizabeth Hospital, Covington.

K. E. Lanter, M.D., a graduate of the University of Louisville School of Medicine in 1956, started practice in Florence on July 2. He completed his internship at St. Elizabeth Hospital, Covington, in June.

Paul E. Lett, M.D., started practicing in Lancaster and Garrard County on July 8. A veteran of World War II, Doctor Lett comes to Lancaster from Akron General Hospital in Akron, Ohio, where he had a surgical residency. Doctor Lett graduated from the University of Louisville School of Medicine in 1953.

Lloyd P. May, M.D., a graduate of the University of Louisville School of Medicine in 1953, has started practice in Danville. Doctor May interned at Baptist Hospital from 1953-54. He recently completed a tour of duty with the U. S. Navy.

William M. Petty, Jr., M.D., a native Louisvillian, has opened an office in Fern Creek. He was formerly located in Elkton, Kentucky. A graduate of the University of Louisville School of Medicine in 1952, Doctor Petty served his internship at Brooke Army Hospital, Detroit, Michigan.

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Robert W. Dockery, M.D., a graduate of McHarry Medical College in 1940 and formerly associated with the Louisville Veterans Hospital, opened offices in Louisville in June. Doctor Dockery did graduate work at Harvard University, interned at Lincoln Hospital in Durham, North Carolina, and received specialized training at the Veterans Administration Hospital, Tuskegee, Alabama.

W. L. Burke, M.D., a graduate of the University of Louisville School of Medicine in 1956, has become associated with Keith Smith, M.D., and B. E. Sanderlin, M.D., in Corbin. Doctor Burke interned at Good Samaritan Hospital in Lexington.

Carolyn H. McKinley, M.D., and George G. McKinley, M.D., have moved to Glasgow, where they will be associated with the Howard Clinic, limiting their practices to pediatrics. Doctor Carolyn, a graduate of Vanderbilt University School of Medicine in 1950, and Doctor George, a graduate of the University of Louisville School of Medicine in 1946, have both been serving their residencies at Children's Hospital in Louisville since 1954. Doctor George, who worked with radio active isotopes while with the Field Medical Service at Fort Sam Houston, will have charge of the radio active laboratory at the clinic. Doctor Carolyn is the daughter of the founder of the Clinic, C. C. Howard, M.D.

Charles D. Clark, M.D., a graduate of the University of Tennessee School of Medicine in 1950, joined the staff of the Houston-McDevitt Clinic in Murray on July 1. A native of Kirksey, Kentucky, Doctor Clark interned at Baptist Memorial Hospital in Memphis, Tennessee, from 1950-51. He has practiced general medicine in Murray since 1951.

John D. Lovett, M.D., has begun the practice of internal medicine in Louisville. Doctor Lovett, who graduated from Ohio State with an M.D. degree in 1950, interned at the University Hospital in Columbus. From 1952-54, he served as flight surgeon aboard the carriers Boxer and Yorktown. For the past three years, he has been taking a residency in internal medicine at Henry Ford Hospital, Detroit, Michigan.

Si A. Past, M.D., has transferred his practice from Sharpsburg in Bath County to Olive Hill in Carter County. He was accepted into the Carter County Medical Society as an active member on May 29.

Mack Rayburn, M.D., has returned to Kentucky after two years in military service and has opened an office in Owensboro.

The revised doctor draft bill—now Public Law 85-62—was signed by President Eisenhower on June 27, four days before the expiration of the old doctor draft law. Under the latter, about 10,000 physicians were called up for two or more years service, starting at the time of the Korean war. The new law provides for the selective call-up of physicians and dentists to age 35 if they were deferred from the regular draft at any time after June, 1951, in order to complete their professional training. The law is effective for two years, and will expire at the same time as the regular draft.

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In Memoriam

JAMES WEBBER BAIRD Sadieville 1866 - 1957

Doctor Baird, one of the nation's oldest active physicians at the time of his retirement in 1953, died at the Shelbyville Masonic Home on June 25 following a lengthy illness.

A graduate of the Cincinnati College of Medicine where he was third in his class, Doctor Baird started practicing in Harrison County in 1889. He came to Scott County in 1890, and had lived in Sadieville until recently.

EDWARD J. BUTEN, M.D. Fort Thomas 1882 - 1957

A practicing physician in Newport for 40 years until his retirement in 1947, Doctor Buten died on June 22 in Fort Thomas where he had been living since his retirement.

Doctor Buten, who limited his practice to treatment of eye, ear, nose and throat, graduated from Eclectic Medical College in 1907. He did post graduate work at Ohio-Miami Medical College, New York Post-Graduate Medical School, and the Medical School of the University of Cincinnati.

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ANNIE VEECH, M.D. Louisville 1871 - 1957

Doctor Veech, organizer of the first maternal and child-health program in the state, died in the Pewee Valley Hospital on July 10. She was taken to Norton Infirmary after suffering a stroke in May 1956, and transferred to Pewee Valley last July.

A graduate of the Women's Medical College of Pennsylvania in 1909, Doctor Veech was the first director of Louisville's Bureau of Maternal and Child Hygiene.

H. CLAY WHITE, M.D. Covington 1872 - 1957

Doctor White, Kenton County Health officer for 33 years, died June 29 in the Veterans Administration Hospital in Covington.

Active in state and county politics for many years, Doctor White was president of the First National Bank of Latonia. He graduated from the old Medical College of Ohio in 1897.

JESSE T. SMITH Gamaliel 1867 - 1957

Doctor Smith, a practicing physician for more than 60 years, died at his home in Gamaliel on June 23

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IN MEMORIAM

at the age of 90, after several months of critical illness.

A native of Benton, Illinois, Doctor Smith graduated from Tennessee Medical College in 1895. He started his practice in Gamaliel in 1903.

JOHN F. GLASSCOCK, M.D.

Sonora

1880 - 1957

A graduate of the old Louisville School of Medicine in 1900, Doctor Glasscock died July 2, three days after entering Kentucky Baptist Hospital in Louisville.

A native of Franklin Crossroads, Hardin County, Doctor Glasscock had practiced medicine in Sonora for 56 years. His practice extended into LaRue, Hart, Grayson, and Hardin counties.

CLARENCE T. COLEMAN

Frankfort

1881 - 1957

"General Practitioner of the Year" last year, Doctor Coleman, a physician and surgeon for almost half a century and four times Mayor of Frankfort, entered King's Daughters Hospital on July 8 and died the next day.

A graduate of the University of Louisville School of Medicine in 1907, Doctor Coleman, who delivered more than 4,500 babies during his career, mixed political service and medicine with "conspicuous success."

Student Employed Under Grant

A grant permitting Central State Hospital, Lakeland to employ a medical student during the summer months has been awarded that hospital by the Smith, Kline and French foundation. Jerry Flowers, a senior at the University of Louisville Medical School has been employed at the hospital to determine reasons for admitting elderly patients to the hospital.

The hospital at present is admitting an average of 75 patients a month, with one out of three being over 65 years old. The study will begin at the time the patient enters the hospital.

U. of L. Research Lab to Continue

The University of Louisville's Institute for Medical Research is to be continued—without a director. That was the decision of the unit's directors in acting upon the request of the director, Joseph P. Holt, M.D., to return to full-time research. Doctor Holt will continue as professor of heart research, a chair financed by the Kentucky Heart Association.

The institute was established in 1947 to further research at the U. of L. Medical School and to aid in providing highly-trained instructors for the school. Financed by grants from cancer, heart and other outside agencies, the institute has administered some \$162,000 for various research projects during the past year.

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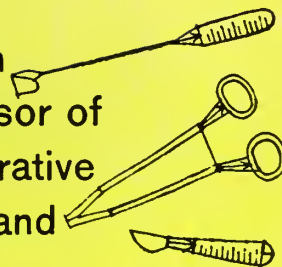
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County Society Reports

Fayette County

A motion that the Fayette County Medical Society back the Health Department in its efforts to eliminate production of raw milk in the county was passed by the Society at its April meeting held at the Good Samaritan Hospital. Two dairies in the county were reported selling raw milk.

The scientific program of the meeting included the presentation of a paper, "Recent Advances in Rheumatology," by C. N. Kavanaugh, Jr., M.D., and a discussion by C. E. Rankin, M.D.; William E. McDaniel, M.D., and Ullin W. Leavell, Jr., M.D.

A letter from William T. Swartz, M.D., regarding free choice of physicians in industrial health programs, was referred to the Public Relations Committee. A letter from C. C. Johnston, M.D., regarding excessive expenditures of the Veterans Administration, was referred to the Public Health and Legislation Committee.

A recommendation was made by the Special Committee on Polio Vaccination—Franklin B. Moosnick, M.D., chairman—that vaccination clinics could be set up by lay organizations for employees on a voluntary basis, provided the organization had a regular medical set-up. It was reported that excessive charges by some physicians had caused vaccinations to lag.

The Public Health and Legislation Committee reported disapproval of a recommendation by A. M. Moore, M.D., that the Society take some part in the

program for prevention of automobile accidents. The Executive Committee accepted the disapproval.

W. K. Massie, M.D., gave a summary of the report of the AMA Committee on Health, concerning the United Mine Workers and other groups covered specifically by insurance.

An invitation from the Jefferson County Medical Society to the second annual Senior Day program was read.

Letcher County

The Letcher County Medical-Dental Society, at its meeting June 25 in Whitesburg, elected Julius W. Bell, M.D., Jenkins, to regular membership in the County and State Societies and AMA. Noah H. Short, M.D., Norton, Va., a former member of the County Society, was made an associate member.

The Society voted to give County and State memberships to the secretary (now and in the future), the dues to be paid out of the Society's treasury.

The Society set August 13 as the tentative date for its August meeting, with Pine Mountain Hotel, Whitesburg, as the meeting place if arrangements could be so made.

AMA's Council on Medical Service is supporting a new program endorsing periodic health appraisal for children, sponsored by the National Congress of Parents and Teachers. In supporting the program, AMA is reaffirming its approval of continuous health supervision of children from birth through their school experience, rather than only a program of a single appraisal on school entrance.

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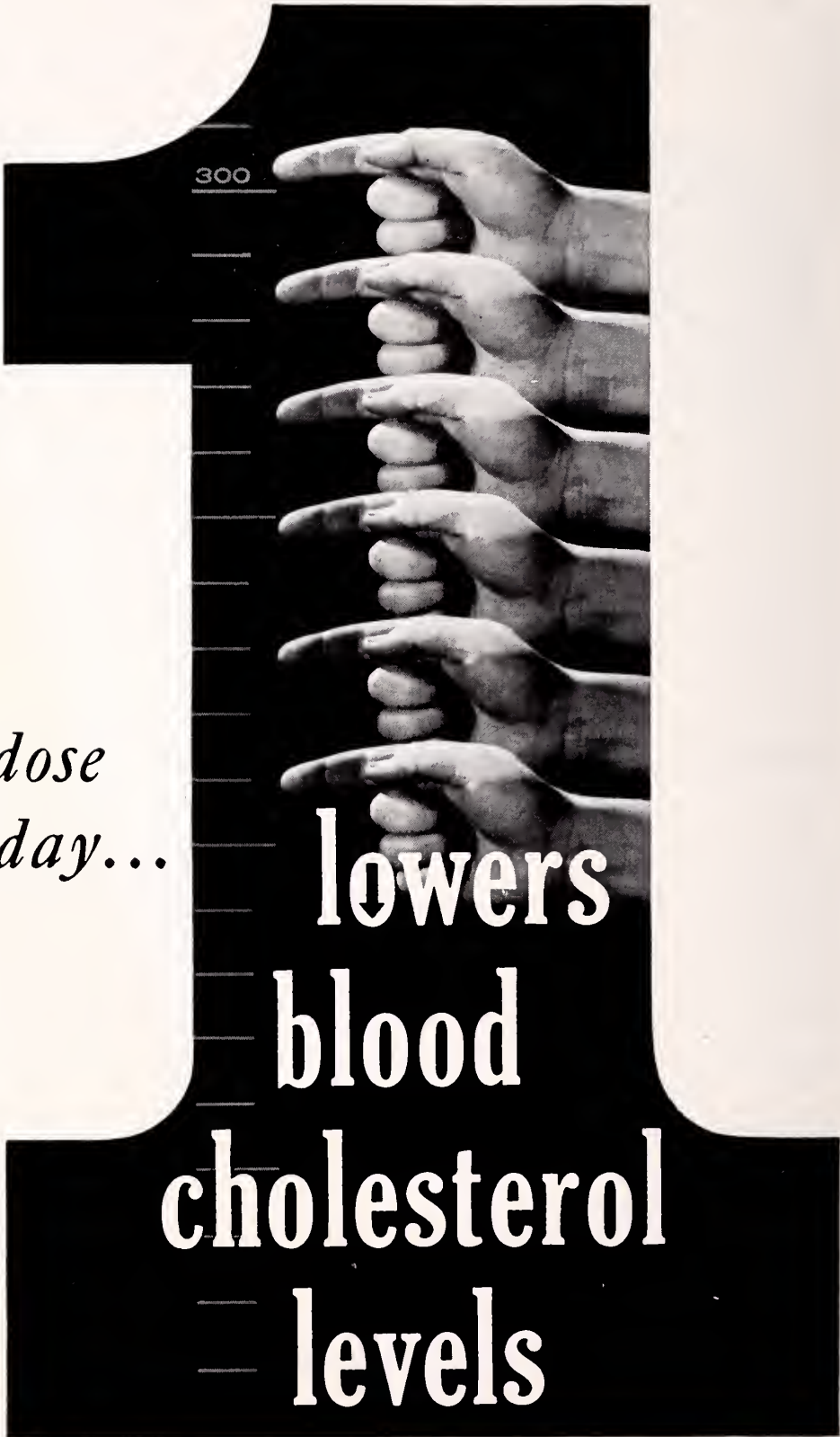
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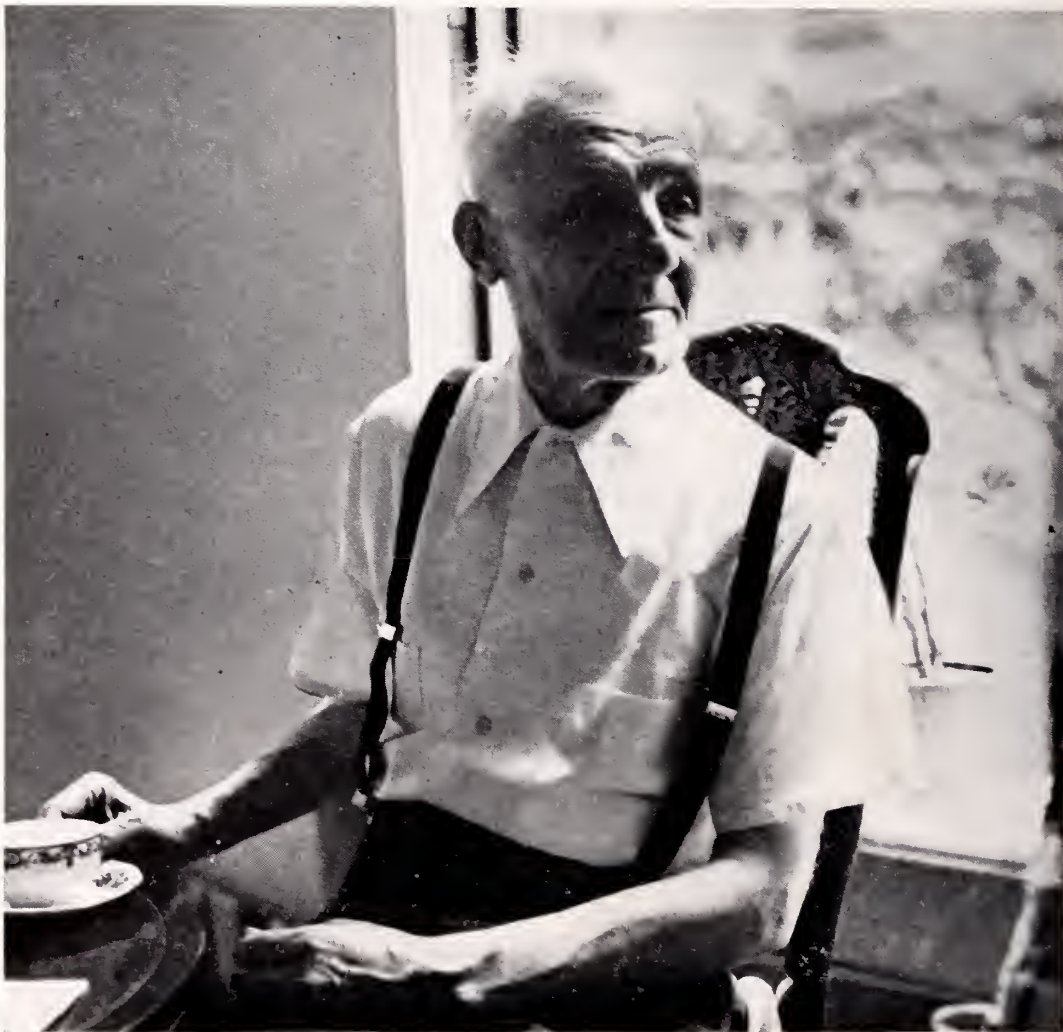
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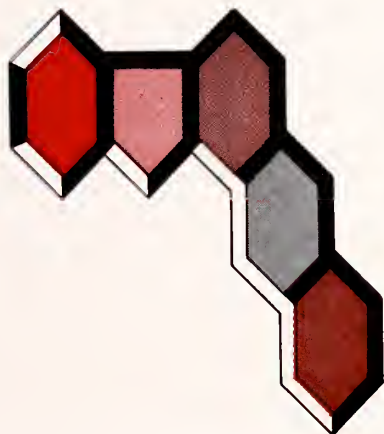
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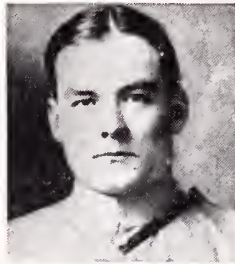
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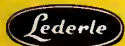
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Bacterial Endocarditis

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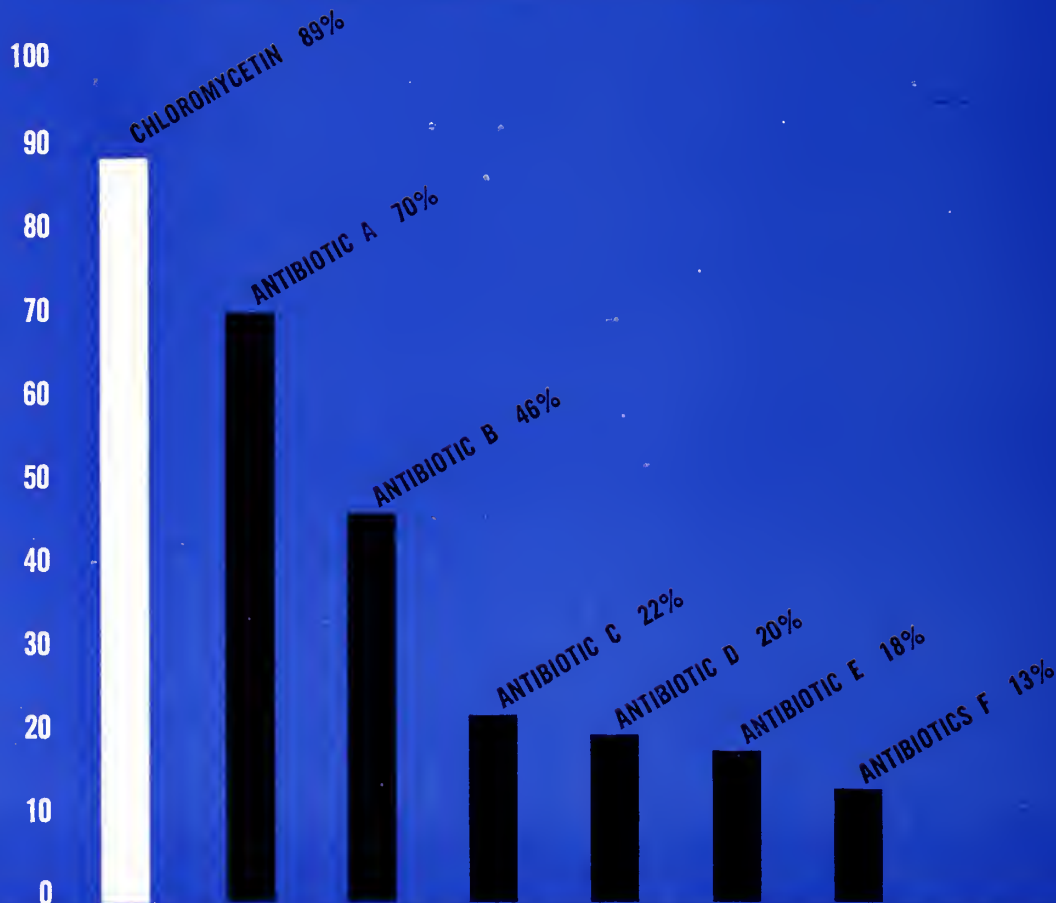
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A REPORT ON A PROMISING CONCEPT IN ANTIMICROBIAL THERAPY: CONCURRENT ADMINISTRATION OF CHLOROMYCETIN AND GAMMA GLOBULIN

In treatment for infection, the physician is confronted with complex interactions between pathogen, antimicrobial agent and host. The pathogen represents the unselected factor, the therapeutic agent the component over which the physician exercises maximum control. But even with optimal antibiotic therapy, the eventual elimination of the infective agent and the resolution of pathologic changes depend upon efficient host response.^{1,2}

Passive transfer of antibodies through gamma globulin provides a broad antibacterial spectrum because of origin in adults exposed to a variety of microorganisms. Employed as a protective element against some of the more common contagious diseases, gamma globulin permits more competent participation by the host in the fight against established infection.

Rationale for immuno-antibiotic therapy lies in simultaneous direct attack on the pathogen and re-enforced host resistance, which implies usefulness in treatment for acute fulminating, highly refractory, or prolonged infections.

EXPERIMENTAL STUDIES ENCOURAGING

In carefully controlled studies in mice, Fisher and his colleagues in Parke-Davis Research Laboratories, using pooled human gamma globulin and Chloromycetin (chloramphenicol, Parke-Davis) concurrently, demonstrated a high degree of therapeutic effectiveness in infected animals.³ Five types of infection induced with species of *Staphylococcus aureus*, *Streptococcus pyogenes*, *Proteus vulgaris* and *Pseudomonas aeruginosa* responded to joint therapy with gamma globulin and Chloromycetin, each agent having shown at deliberately low doses in previous work little or no activity in these mouse infections when used separately. Fisher's experiences with hemolytic streptococci have been confirmed.⁴

Tests now in progress with pneumococci, salmonellae and additional strains of pseudomonas and proteus indicate that marked increases in survival rates may be anticipated in any infection where chloramphenicol has previously demonstrated therapeutic activity.³ These observations suggest that immuno-antibiotic therapy can effect cures in a variety of refractory microbial diseases.

PROMISING IN EARLY CLINICAL TRIAL

Observations analogous to those of Fisher have been reported from the clinic.⁵⁻⁷ More recently, the clinical use of gamma globulin in conjunction with antibiotics was undertaken by Waisbren⁸ on the basis of Fisher's experimental work. His series of 46 patients with systemic and localized infections due to various strains of staphylococcus, pseudomonas, salmonella, proteus and to the pneumococcus had failed to respond to maximum effort with conventional therapeutic measures. Marked clinical improvement in

six of these acutely ill patients shows clearly "...that in certain instances the addition of gamma globulin to antibiotic therapy may give a clinical result that could not have been obtained with the antibiotics used alone. In each of these cases, a long and extensive control period in which antibiotics were being vigorously administered had failed to produce a response but when gamma globulin was given with approximately the same dosages of antibiotic, rather marked improvements occurred."⁸

While the precise mechanism underlying the salutary effect of gamma globulin remains to be clarified, the existence of quantitative hypogammaglobulinemia was ruled out in patients in this series.⁸

A RATIONALE FOR IMMUNO-ANTIBIOTIC THERAPY

Although the relationship of susceptibility to infection and status of the host is well recognized, host resistance is an aspect of infectious disease still not understood in an era of extensive and of massive antibiotic therapy. Most antibiotics, in concentrations tolerated by living tissues, have bacteriostatic rather than bactericidal effect. In the clinic, bacteriostatic doses are most frequently given and host defense mechanisms are responsible for the eventually satisfactory clinical result.⁴

The problem of therapeutic failures despite vigorous courses of antibiotic therapy may be due to some disturbance in the immune process.⁹ In addition, disproportionately high mortality rates in the extremes of life lend support to the impression of inadequate defense mechanisms, since these are underdeveloped and immature in the very young and may be impaired or depressed in the aged.⁴

Any discussion of immuno-antibiotic treatment must at present remain largely conjectural. From preliminary evidence, however, this approach to therapy appears worthy of consideration, especially in patients in whom adequate antibiotic therapy for active infectious processes has been disappointing. While the concept of enlisting the aid of the host in combating pathogenic microbes, thereby affording the physician control of two of the three principal interacting factors, is not new, enhancement of host resistance through use of gamma globulin in treatment for microbial disease is indeed a promising one.

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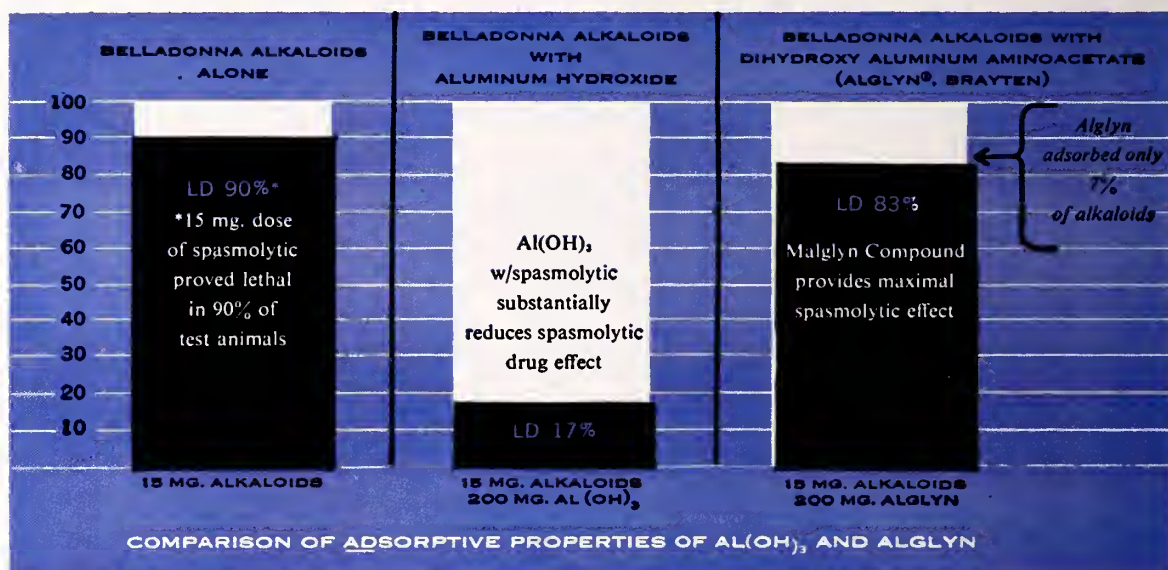
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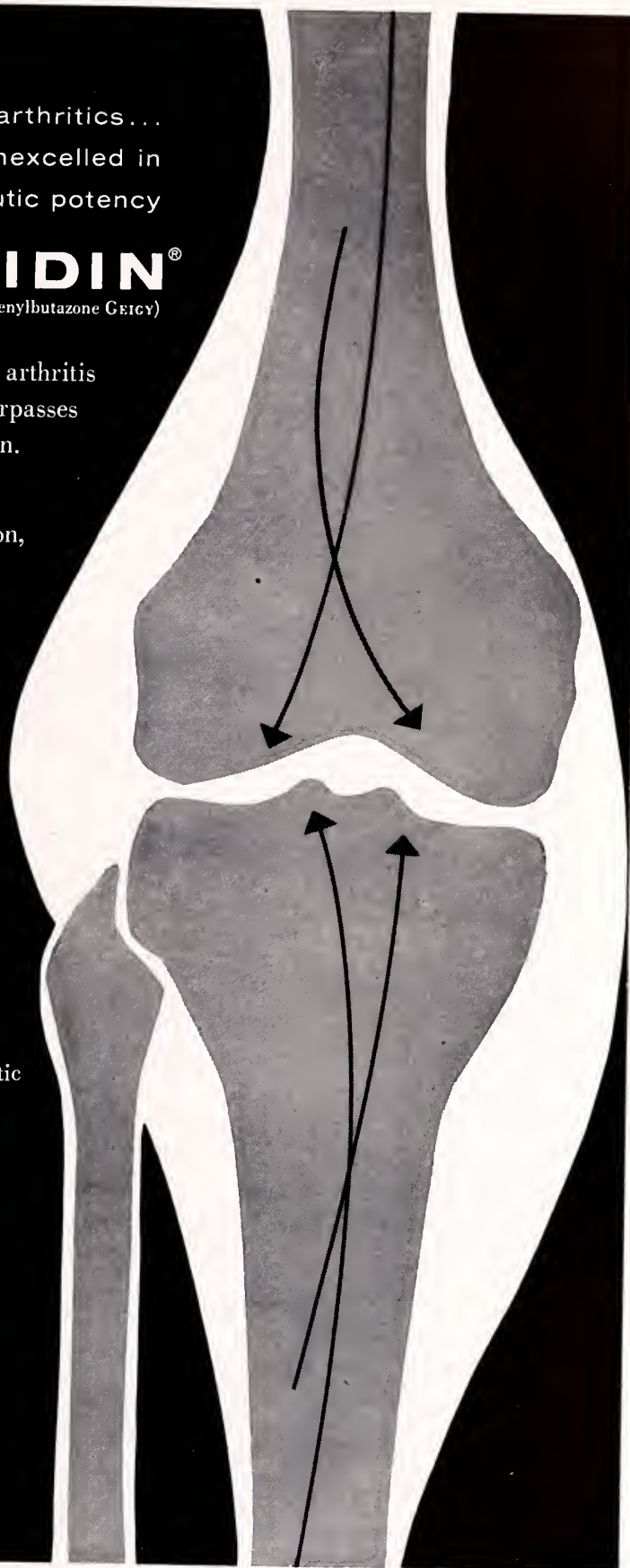
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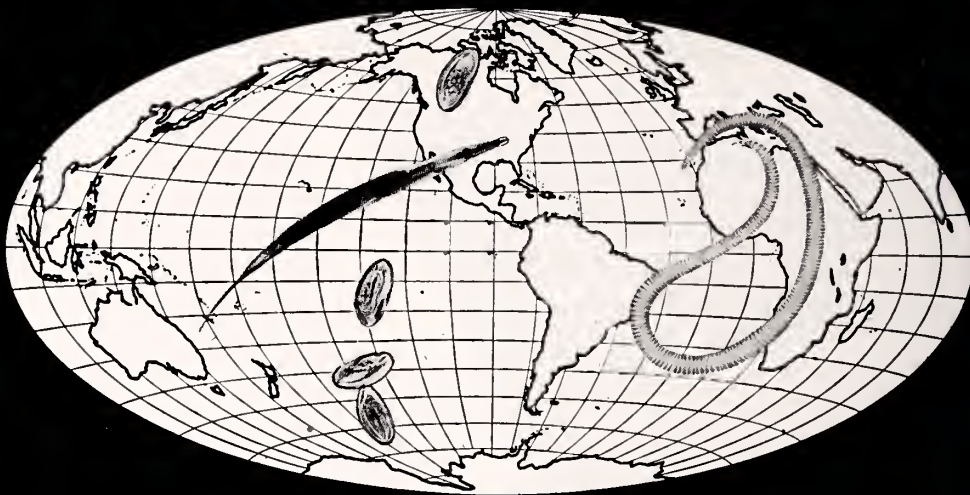
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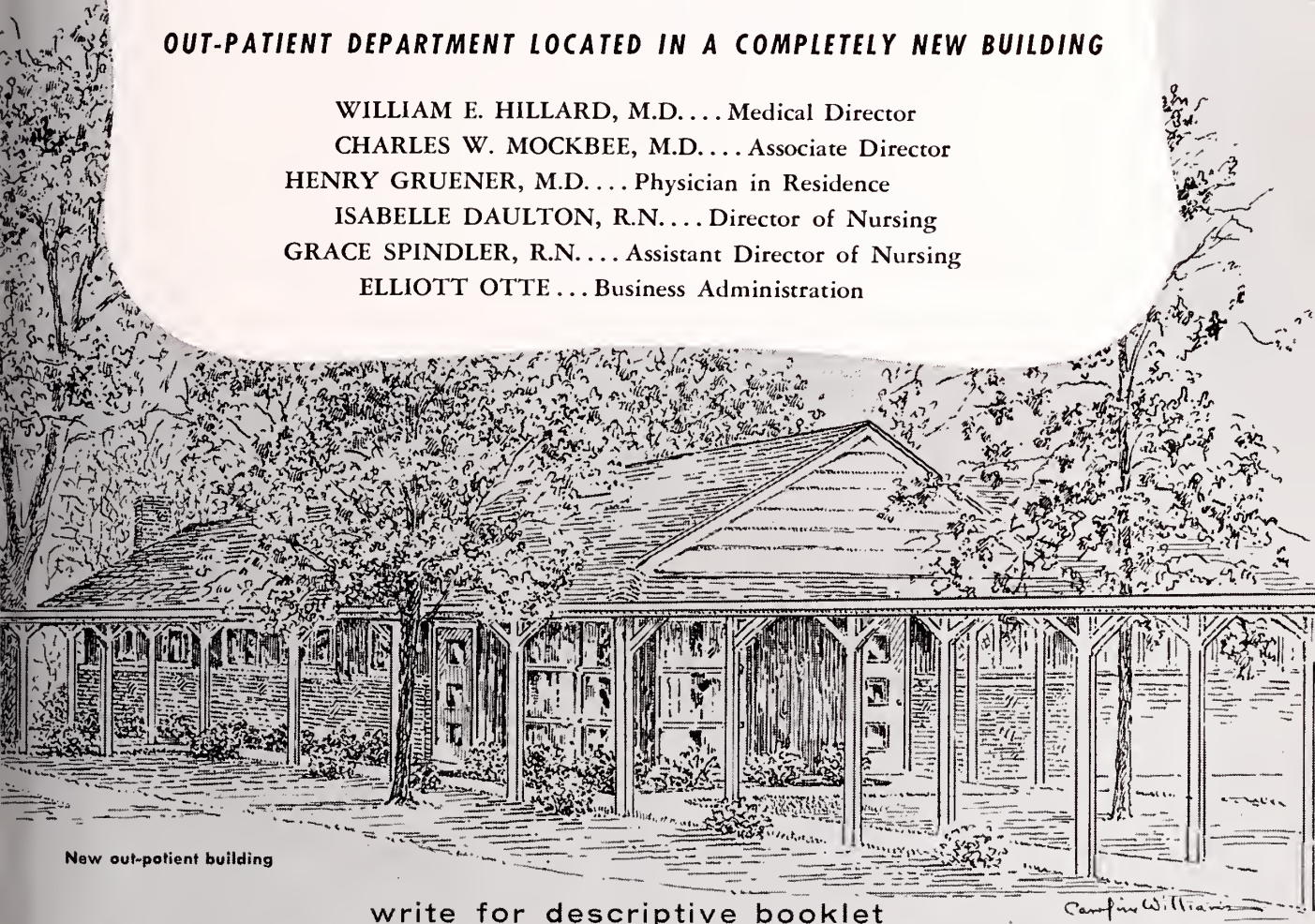
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the
President**

Since this is my last President's Page to you, I want to take this opportunity to thank again those who saw fit to elect me President of your organization. I hope I have done my job well; at least, I have tried hard.

I also want to thank the officers of this organization, particularly the Vice Presidents who have been most helpful and the Secretary who has worked closely with me in my decisions. I would also like to express my great appreciation to the Council for its long work and hard hours.

I wish I had the space to thank the chairmen and members of each committee for the very fruitful work they have done this year. Without our fine hard working committees who do the ground work, I am afraid your state association would not progress along as nicely as it has done in recent years.

And certainly no recent President could go out of office without thanking our hard working Headquarters Office Staff for its valuable work in carrying out the wishes of this organization.

R. R. Slucher



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IN THE BOOKS



THERAPY OF FUNGUS DISEASES: AN INTERNATIONAL SYMPOSIUM: edited by Thomas H. Sternberg, M.D., and Victor D. Newcomber, M.D.; published by Little, Brown and Company, Boston and Toronto, 1955. 334 pages.

The need for information regarding the pathogenesis and treatment of fungus infections has assumed increased importance in the past few years. The increased incidence and clinical significance of such infections have been due, in part, to the wider use of antibiotics in the prevention and treatment of the more common bacterial infections.

This symposium consists of the contributions of some 208 scientists representing every section of the world.

Certain fundamental aspects of fungus infections—such as soil as a natural reservoir for human pathogenic fungi, ecology and spread of pathogenic fungi, an evaluation of laboratory methods for testing fungicides, the influence of hormonal conditions on experimental fungus infections, the problems of active immunization, immunology and pathogenesis—have been discussed. Results of the most recent research pertaining to these problems are presented.

Much previously unpublished information is presented on the antifungal antibiotic nystatin (mycostatin), as well as other antifungal agents including: diphenylpyraline, undecylenic acid, sulfur compounds, aromatic diamidines, cinnamic acid, nitrostyrenes, filipin, sulfonamides, sulfones, chlorquinaldol, NEPERA (1968), actidione, MRD 112, stilbamidine, hydroxy-stilbamidine, rhodanine, and others.

This book, consisting of up-to-date information by outstanding researchers in the field of mycology, should provide helpful information to clinicians dealing with fungus infections.

Grover Sanders, M.D.

THERAPEUTIC EXERCISE FOR BODY ALIGNMENT AND FUNCTION: by Marian Williams, Ph. D., and Catherine Worthingham, Ph. D.; published by W. B. Saunders Company, Philadelphia and London, 1957. 127 pages. Price, \$3.50.

Doctors Williams and Worthingham are considered competent in the field of physical therapy. They have participated in a considerable number of research projects and contributed many valuable papers to the literature pertaining to muscle testing and similar related subjects.

The loose-leaf, paper-bound booklet, "Therapeutic Exercise," is well written and has simple and clear graphic illustrations.

The introduction is an excellent discussion on posture. It is concisely written, brief, and easily readable, with an analysis of recent work in this field.

The analysis of body alignment is well illustrated and although there are some minor deviations from accepted medical terminology in reference to body types, they facilitate easier understanding and wider interdisciplinary interpretation.

As indicated by the authors in the preface, most of the therapeutic exercise program and illustrations have previously been published and are standard and accepted procedures in the field of physical therapy.

The appendix is an exceptionally good illustration of origin and insertion of muscles with brief descriptions of functional anatomy. This section would be useful to students of physical and occupational therapy as well as the medical student in training in functional anatomy.

The bibliography used throughout this book is of wide scope. Although there are omissions of some excellent works by American medical writers, the material is well authenticated.

This booklet is not too technical to be useful as a student reference. It could prove a valuable source for physicians in private practice because the illustrations and explanations of specific exercises are quickly and easily taught and demonstrated to patients. These exercises are concisely classified as to various bodily segments. The progression of exercise programs is well illustrated.

Rex O. McMorris, M.D.

THE COMPLETE PEDIATRICIAN FOR GENERAL PRACTITIONERS, PEDIATRICIANS, INTERNS AND STUDENTS: by W. C. Davison, M.D., and Jeana Davison Levinthal, M.D.; seventh completely rewritten edition; published by Duke University Press, Durham, N. C., 1957. Price, \$4.25 with check; \$4.50 on credit.

This book was first published in 1919, and since then has been revised and rewritten. This edition is the seventh. The present book has been brought up to date in so far as is possible, and includes the more recent advances in pediatric diagnosis and therapy.

The actual pattern of the book has changed very little, and to one not accustomed to using it, it may seem difficult at first, but this is quickly overcome with a little practice. The material is presented in a simple, concise manner for quick reference. There is no wasted space.

The book is divided into thirteen chapters. The first seven are devoted to diseases of infants and children. Each chapter deals with a complete system, such as the respiratory group of diseases. The more common diseases are adequately covered. Enough is written about the rare diseases to help the physician in his diagnosis and treatment of diseases of infants and children.

(Continued on Page 826)



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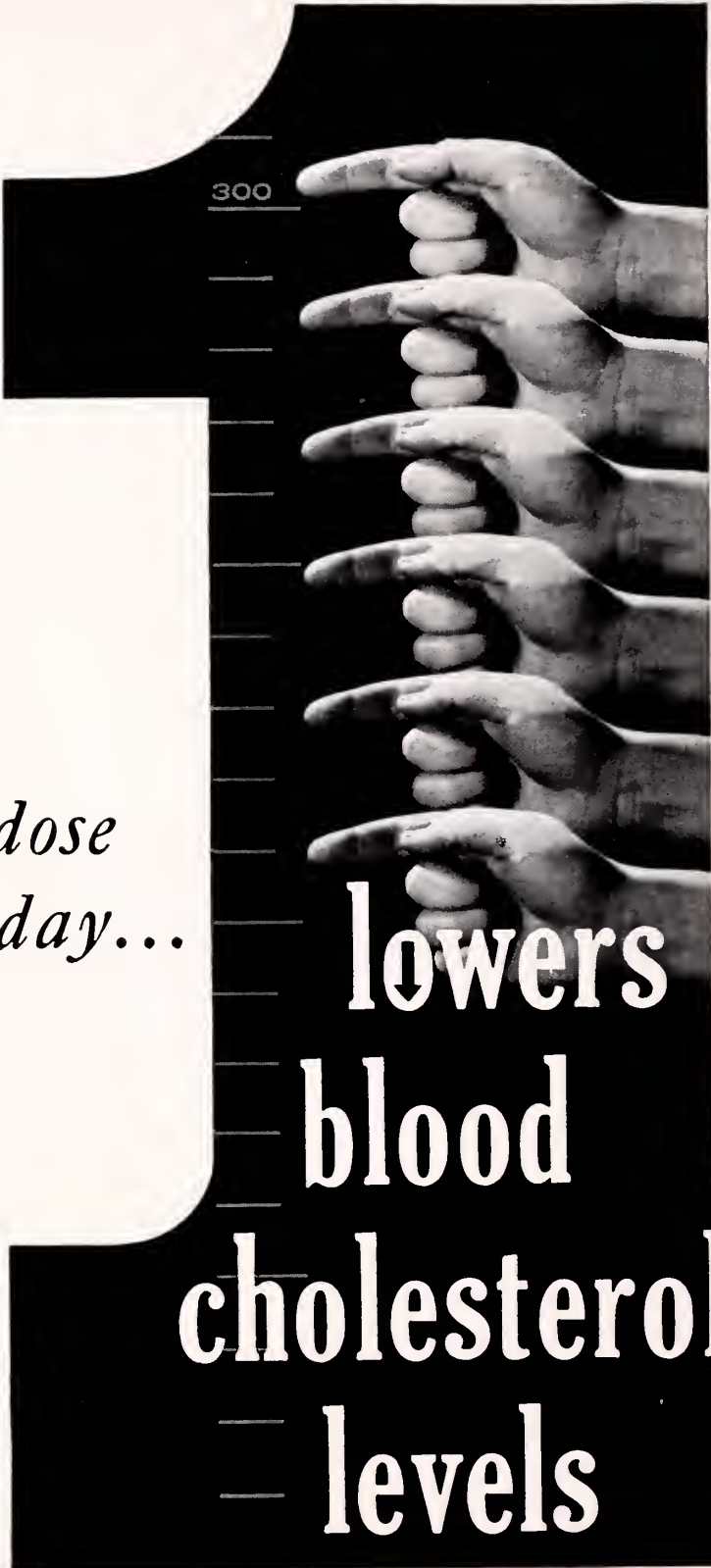
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WASHINGTON NEWS DIGEST



Washington, D. C.—If dangerous epidemics of Asian flu break out in the country this fall and winter, the medical profession will have its hands full. But the doctors won't be taken by surprise, nor will they lack specific information on proper treatment.

While the attacks in the U. S. were still sporadic and the death rate low—three fatalities in the first 11,000 reported cases—a number of major, nationwide efforts were under way to combat the disease in the months when influenza rates generally are the highest.

1. Acting in coordination with U. S. Public Health service, the American Medical Association was pressing forward with its campaign to insure that all physicians are informed of how to deal with the disease.

2. In line with recommendations of the AMA committee, a number of state medical societies by mid-August had laid out complete emergency plans, ready to be put in operation if needed.

3. U. S. Public Health Service epidemic intelligence experts were scanning the country for outbreaks that might be Asian influenza, and other PHS officers were investigating acute respiratory diseases. PHS also set up machinery to keep the medical and health professions informed on nationwide developments in the influenza picture.

4. Advising Surgeon General Burney was a special committee, which included representatives from AMA, American Academy of Pediatrics, American Academy of General Practitioners and the Association of State and Territorial Health Officers.

5. Manufacturers of the vaccine, by running their plants on two or three shifts and seven days a week, were hoping to have produced 60,000,000 cc. by February 1.

There was, of course, the possibility that with Congress in session through most of the summer a vast federal program would be set up, with the U. S. purchasing and allocating the vaccine. It was heartening to the medical profession that this possibility was pretty well eliminated in the early stages when the Department of Health, Education, and Welfare announced the following as official policy:

"The Public Health Service, in cooperation with the medical profession, will stimulate and promote a nationwide voluntary program of vaccination against the prevalent strain of influenza. It will not, however, request federal funds for the purchase or administration of vaccine—except for its own legal beneficiaries. The State and Territorial health officers

and the American Medical Association have jointly assured the Surgeon General that community resources, both public and private, will be mobilized to provide vaccinations for persons who are unable to pay for such protection."

This policy was reaffirmed later by the White House, when the President asked for half a million dollars to finance the additional work for Public Health Service. The White House statement said flatly that it did not plan to have the federal government buy vaccine.

The AMA's Board of Trustees selected as members of the special committee the same physicians who make up the Civil Defense Committee, with Dr. Harold C. Lueth as chairman. In addition to the work of this committee, special articles are being published in the AMA Journal, mass circulation media are being used to bring information on Asian influenza to the lay public and the AMA Council on Drugs is investigating and reporting to physicians on the use of antibiotics in treatment of the disease.

NOTES:

To wind up a long investigation of the safety of chemical additives to foods, a House committee called in a panel of scientists for two days of discussion. In general they concluded: Be careful about any mandatory federal controls.

Another hearing on weight-reducing preparations sold over-the-counter in drug stores heard a parade of witnesses, all of whom had about the same opinion: In themselves, the pills are virtually useless in inducing loss of weight, but their other effects range from harmless to definitely dangerous.

Veterans Administration is increasing fees to physicians under the hometown care program, with the new schedules varying by states and areas. During this fiscal year VA will pay out \$8 million under this program.

A former AMA president, Dr. Elmer Hess, now heads two government advisory committees, the Health Resources Advisory Committee to Office of Defense Mobilization and the Medical Advisory Committee to Selective Service, membership of which is the same. He succeeds Dr. Howard Rusk.

Secretary Folsom is considering appointing a committee of outsiders to investigate and evaluate progress on medical research by the federal government.



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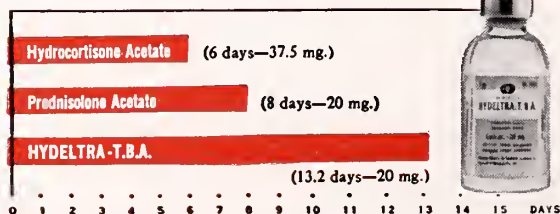
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PUBLIC HEALTH PAGE

New Developments in Asiatic Influenza

RUSSELL E. TEAGUE, M.D.

State of Kentucky

Several developments have taken place during the past few days which will be of considerable interest to those involved with Asian influenza. Surgeon General Burney, on August 1, outlined in a press release what is known on the progress of Asian influenza in this country, the prospects for the future and the steps being taken to fight the disease including the nationwide preparedness campaign inaugurated by the American Medical Association. Dr. Burney announced that the Public Health Service will undertake an extensive educational and promotional campaign to encourage maximum use of influenza vaccine in the population on a voluntary basis as quickly as it becomes available. The AMA and the Association of the State and Territorial Health Officers will join in this program.

This course of action is based on the present behavior of the Asian influenza epidemic, the distinct probability that the country will have a large outbreak this fall or winter, and the fact that no assurance can be given that the virulence of this organism will not increase in the next few months.

Army medical teams, which investigated the early epidemic, noted that the isolated viruses appeared unusual in laboratory tests. Surgeon General Burney reports that "further analyses demonstrated that the virus is a Type A, but is quite different, antigenically from any previously known Type A strains. No protective antibody could be demonstrated from the sera from human beings repeatedly vaccinated with previously known Type A strains. The only means of prevention is an influenza vaccine containing the Asian strain of virus."

Since its occurrence in Hong Kong in April, millions of cases have been reported from the Western Pacific to the Far East. Attack rates have been approximately 20% with case fatality rates running at approximately 0.2%.

Localized outbreaks in the United States have occurred during the last two months and the attack rates ranging from 30 to 70%. It is apparent that our people are probably highly susceptible to this new Asiatic strain of influenza. Up to August 2, 1957, over 11,000 cases have been reported in the United

States. However, there has been only three deaths recorded. Kentucky has been seeded on four different occasions with over 120 cases of suspected influenza under surveillance up to the present time, from all over the State.

History suggests that the spread of the disease will accelerate with the advent of cold weather. An epidemic would strike most areas almost simultaneously with probably no more than a few weeks difference between the epidemic peaks in Boston and San Francisco.

Dr. Burney reports that there are three facts which set the stage for a large scale epidemic in this country as follows: "The high degree of susceptibility, the wide spread seeding, and the approaching winter." Proper and prompt reporting of all suspected typical cases of influenza by all physicians each week will aid in keeping a close watch on any impending epidemic in Kentucky.

The Surgeon General said that the six manufacturers licensed to produce influenza vaccine have set a production goal of at least 60 million cc. (doses) by February 1. Those licensed to manufacture the influenza vaccine are: Eli Lilly and Company, Indianapolis, Indiana; Lederle Laboratories, New York, New York; Merck, Sharp & Dohme, Inc., Philadelphia, Pennsylvania; National Drug Company, Philadelphia, Pennsylvania; Parke-Davis & Company, Detroit, Michigan; and Pitman-Moore Company, Indianapolis, Indiana.

No Federal or State funds are being made available to provide for supplies of the vaccine. The vaccine may be obtained through routine commercial channels from the above mentioned manufacturers. Dr. Burney just recently announced there would be 6 million cc. released on or about August 17, 1957.

Although it is anticipated that the vaccine will be available in only limited quantities, it is advisable that as many people as possible be immunized. It is important that all Kentucky physicians, nurses, and hospital personnel be vaccinated since they will be most subject to exposure.

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Liberal protein intake is considered to be of therapeutic value in a wide variety of pathologic conditions.¹ Advances in the understanding of protein metabolism indicate that dietary protein should provide amino acids in proportions paralleling physiologic needs.^{2,3} In experimental studies with animals, low protein diets supplying amino acids disproportionate to needs have been shown to effect physiologic harm by depressing growth, by inducing amino acid and B-vitamin deficiencies, and by causing deposition of fat in the liver.⁴

Hence not only the *amount* of protein but also its *quality* (in terms of its amino acid proportions) is important. It has been suggested¹ that for therapeutic purposes about two-thirds of the ingested protein come from foods of animal source, whose protein resembles human body protein in amino acid interrelationships. Depending on the needs of the patient, the therapeutic diet may supply 1.0 or more grams of protein per kilogram of body weight. Adequate caloric intake is required to protect the dietary protein from dissipation for energy purposes.

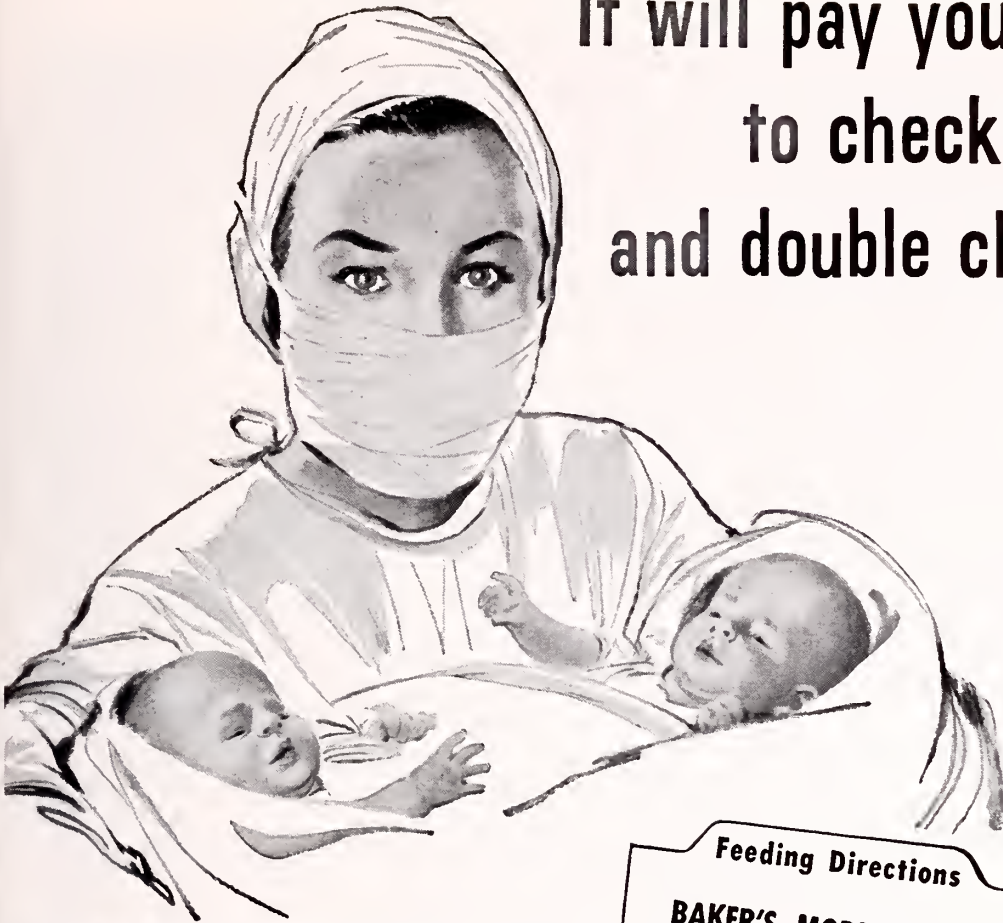
Meat, with its high content of top-quality protein, holds a prominent place among foods which supply this essential for establishing satisfactory levels of amino acids in physiologic proportions. It also contributes valuable amounts of B vitamins and essential minerals—nutrients which play a basic role in intermediate metabolism.

1. Proudfit, P. T., and Robinson, C. H.: Nutrition and Diet Therapy, ed. 11, New York, The Macmillan Company, 1955, pp. 314-320.
2. Harper, A. E.: Amino Acid Imbalance, Toxicities and Antagonisms, Nutrition Rev. 14:225 (Aug.) 1956.
3. Amino Acid Requirements of Adult Man, Nutrition Rev. 14:232 (Aug.) 1956.
4. Amino Acid Imbalance and Supplementation, Editorial, J.A.M.A. 167:884 (June 30) 1956. Council on Foods and Nutrition, American Medical Association: Importance of Amino Acid Balance in Nutrition, J.A.M.A. 158:655 (June 25) 1955.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

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†Ayd, F. J., Jr.: The Treatment of Ambulatory and Hospitalized Psychiatric Patients with Trilafon, presented at Ann. Meet., Am. Psychiat. Assoc., Chicago, Ill., May 13-17, 1957.

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The JOURNAL of the Kentucky State Medical Association

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 55

SEPTEMBER, 1957

NO. 9

BACTERIAL ENDOCARDITIS: AN ANALYSIS OF FIFTY CASES*

THOMAS N. STERN, M.D.**

Memphis, Tennessee

BACTERIAL endocarditis, since the advent of the antibiotics, has become a curable disease. However, despite all the advances in therapy, the mortality rate in treated cases averages 20 to 30 per cent^{1, 2, 3}; in one series 65 per cent died.⁴ The number of deaths has remained in the same range over the last 5 years, although new antibiotics are being thrown into battle each year. It seems reasonable, therefore, to look beyond the actual control of infection for weapons to further increase survival in this disease. For this purpose, 50 consecutive cases from the wards of the John Gaston Hospital were studied. Because of the difficulty in making a hard and fast differentiation between acute and subacute bacterial endocarditis in several cases, as well as the lack of importance of such a differentiation, the two are grouped simply as bacterial endocarditis.

Findings

UNDERLYING PATHOLOGY—Table 1 lists the incidence of underlying rheumatic heart disease, syphilitic heart disease, congenital heart lesions and calcific aortic stenosis in

Table 1
UNDERLYING PATHOLOGY

Rheumatic Heart Disease	32
Mitral valve involvement	24
Aortic valve involvement	18
(aortic and mitral both)	11)
Tricuspid valve involvement	1
Congenital Heart Disease	2
Interventricular septal defect	2
Luetic Heart Disease	5
Calcific Aortic Stenosis	1
No definite underlying lesion	10
Total	50

*Presented before the First Councilor District meeting, Paducah, April 24, 1957.

**Instructor in Medicine, University of Tennessee College of Medicine, Memphis, Tennessee.

valves later affected by bacterial endocarditis. In each case, the diagnosis was made only on clearcut clinical and/or pathological grounds; autopsies were done on 94 per cent of patients who died. In particular, the diagnosis of lues was proven anatomically in 4 out of the 5 cases. No definite pre-existing disease was established in 10 cases.

Of interest is the fact that most of these conditions were not diagnosed prior to the onset of bacterial endocarditis. Thus, only 9 out of 32 patients with rheumatic fever, 2 of 5 with syphilis, and 1 of 2 with congenital heart disease knew on admission that there was anything wrong with his heart. In most of these cases, definite proof of the underlying disease was established only at autopsy.

CAUSATIVE ORGANISMS—Positive cultures were present in 39 cases. The organisms found, and the number of deaths in patients with each organism, are listed in Table II.

Table 2
CAUSATIVE ORGANISMS

	Cases	Deaths
<i>Strep. viridans</i>	25	13
<i>Diplo. pneumoniae</i>	4	4
<i>Strep. fecalis</i>	4	2
<i>E. coli</i>	2	2
<i>Strep. pyogenes</i>	1	0
<i>Staph. aureus hemolyt.</i>	1	1
<i>Strep. micros</i>	1	1
<i>K. pneumoniae</i>	1	0

These organisms are the common ones seen in endocarditis; they are not rare or exotic. Theoretically, and by sensitivity tests, all should have responded to the available treatment. In actuality, the majority of cases that survived for longer than one week after treatment was instituted was bacteria-free. In spite of this, there were a significant number of deaths; even streptococcus viridans infection which is usual

ly a smouldering, slow process, and which is almost always responsive to antibiotic therapy, resulted in death in 50 per cent of cases. These findings demonstrate that bacteriological control does not result necessarily in cure of the patient.

SYMPTOMS—The incidence of various symptoms and symptom complexes is analyzed in Table III. "Initial symptom" refers to the first indication of illness noted by the patient. The "presenting symptom" is that symptom which caused the patient to consult a physician.

Table 3
SYMPTOMS

	Initial Symptom	Presenting Symptom
"Febrile complex"	23	17
Embolic phenomena	10	18
Central nervous system	9	16
Pulmonary	1	1
Renal	-	1
Cardiac failure	6	7
"Cold"	2	-
Weakness and Wt. loss	2	1
Abdominal Pain	1	-
Back Pain	1	1
Precordial Pain	1	1
Shoulder Pain	1	1
Nausea and Vomiting	1	2
Petechiae	1	1
Shock	1	1

Under "febrile complex" are included such symptoms as fever, chills, night sweats and generalized aching. Symptoms of central nervous system involvement include severe headache, vertigo, mental confusion, stiff neck, paralysis and coma. The time interval between the initial symptom and the presenting symptom ranged from 6 months to a few hours, with a mean of six weeks.

PHYSICAL SIGNS—The most important physical signs are presented in Table IV in

Table 4
PHYSICAL SIGNS

Fever	45
Murmur	44
Tachycardia	35
Cardiomegaly	20
Cardiac failure	18
Nuchal rigidity	10
Retinal hemorrhage	10
Petechiae (cutaneous or conjunctival)	9
Abdominal tenderness	9
Splenomegaly	8
Paralysis	7

order of frequency. Other physical findings include coma (6 cases), pulmonary consolidation (6), costovertebral angle tenderness (2), auricular fibrillation (2), clubbed fingers (2), cyanosis (1), and tenderness of fingertips (1).

The classical finding of Osler's nodes was not noted in any case.

NEUROLOGICAL COMPLICATIONS—Because of the high incidence (40%) of central nervous system involvement, the frequency of various types of neurological complications is summarized in Table V. In one case both meningitis and mycotic aneurysm were present; in two cases infarcts of significant size and meningitis were found concomitantly.

Table 5
NEUROLOGICAL COMPLICATIONS

Meningitis	10
Cerebral infarct	9
Cerebral abscess	1
Mycotic aneurysm	3

MORTALITY—Of fifty patients, 17 were cured, 33 died; 31 of these were autopsied. Of the 33 deaths, 10 occurred within 48 hours of admission to the hospital; 3 more were undiagnosed and therefore, untreated; 5 died in the first hospital week. Eleven of the remaining 15 who died were afebrile at the time of death and were considered "bacteriologically cured." These 11 all died of intractable cardiac failure from 9 weeks to 11 months after admission to the hospital.

Comments

The 10% incidence of underlying luetic aortic valvulitis in this series is rather high, syphilis being generally reported rather rarely, as a basis for bacterial endocarditis.⁵ This finding is of sufficient interest that these cases are being analyzed in detail in a separate communication; however, some comments are indicated here. The reason for the presence of so many cases in the present paper lies in the locale of the study. Three-fourths of the admissions to the John Gaston Hospital are negroes; syphilis is found in a much larger percentage of this group than in the population as a whole. Regardless of the reason for the number of cases, their presence points out the fact that the syphilitic, as well as the rheumatic valve may be the site of bacterial endocarditis. Patients with luetic aortic valvulitis should, therefore, receive the same precautionary anti-biotic measures for tooth extractions and minor infections as patients with rheumatic heart disease. The higher mortality rate in this group, though not statistically significant, may have been due to the reluctance of the attending physician to accept the diagnosis of endocarditis on a luetic valve.

The fact that so many patients had no previous knowledge of heart disease is disturbing. While few had had previous careful examinations, the majority had had such "routine physicals" as prenatal and preinduction examinations. Many of the murmurs may have been absent or inaudible at the time of examination, but it does seem likely that a larger percentage of murmurs should have been detected. The diagnosis of a functional murmur is indeed a difficult one; the most delicate balance must be struck between creating possible cardiac neurosis and the prophylaxis of rheumatic fever and bacterial endocarditis.

While more patients experienced febrile symptoms than any other as their first indication of disease, they tended to ignore these symptoms, at least for a while. Thus, more patients came to the physician because of the sequelae of emboli than because of fever. It is of interest that 32 per cent had major neurological complaints at the time of admission, and 40 per cent had significant neurological disease during the course of their illness. Emboli to the central nervous system have long been considered an important finding in bacterial endocarditis, but incidence in most published reports ranges from 1.2%⁶ to 17%.⁵ Fetterman and Ashe,⁷ however, found important cerebral symptoms in 18 out of 42 patients, while 3 others had minor indications of cerebral disease. In the present series, there was a greater incidence of neurological findings than of the classical signs of splenomegaly and retinal hemorrhage combined. It seems apparent, therefore, that the diagnosis of bacterial endocarditis should be seriously entertained in all patients with cerebrovascular accidents or meningitis in whom a cardiac murmur is heard. Even a systolic murmur of low intensity should be carefully evaluated and followed under these circumstances.

The mortality rate in this series is unusually high, as compared to that in most other reports. However, the cases are not limited to those treated for endocarditis, but include all in whom the diagnosis was made, either clinically or at post mortem. In this respect, the present results are comparable with those of Newman et al.⁴

If the mortality rate is recalculated only for those patients who received a minimum of 48 hours of therapy, it is found that 64 per cent were discharged from the hospital as "cured."

One third of these, however, died from heart failure within the course of the next year and, therefore, are included in the overall mortality rate in this paper. The fact that 30 per cent died within the first hospital week is an indication that the patients were late in coming to the physician for help. Pointing also to this conclusion is the fact that 22 per cent died even though the infection was brought under control. A significant portion of the mortality, however, must be laid to the medical profession. In many cases the diagnosis was not made or even suspected until the patient had been in the hospital many days; some patients died with no suspicion of the proper diagnosis in the mind of the clinician. Friedberg⁸ has recently suggested that any patient with a significant cardiac murmur and unexplained fever for a week should be treated for bacterial endocarditis. While this may mean unnecessary expense for some patients, there is much merit in the idea.

Summary and Conclusions

Fifty cases of bacterial endocarditis have been reviewed. The presence of 5 cases with luetic heart disease indicate that these patients should receive the same prophylactic measures against endocarditis as those with rheumatic valvulitis. The frequent occurrence of major neurological complications is emphasized.

The mortality rate in bacterial endocarditis will probably not be significantly lowered with the discovery of new antibiotics. Further progress, rather, depends on prophylaxis against, and early diagnosis, of the disease. These in turn, depend on

- 1) Diagnosis of underlying heart disease and adequate instruction of the patient.
- 2) A high index of suspicion on the part of the physician.
- 3) A willingness to treat bacterial endocarditis, on occasion, even before the diagnosis becomes iron-clad.

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HYPERBILIRUBINEMIA AND KERNICTERUS IN PREMATURES

SHERLEY FREUDENBERGER, M.D.*

Louisville, Ky.

KERNICTERUS has been defined as permanent pigmented damage to nuclear masses in the brain, associated with jaundice of the newborn. Most infants with kernicterus die during the early neonatal period. Those who do not, have permanent neurologic sequelae and constitute perhaps 10 per cent of all cases of cerebral palsy. The residua include mental deficiency, cranial nerve abnormalities, deafness, convulsive disorders, and aphasia. Those most seriously affected may manifest marked degrees of all these abnormalities. The neural areas most commonly pigmented and damaged are the basal nuclear masses, the optic nerves, the fiber tracts of the spinal cord, the cerebellar dentate nucleus, the hippocampus, and various cortical areas. When death occurs it is due to extension of the process to the vital medullary centers, or to convulsions with or without associated asphyxia from aspiration.

The Signs of Kernicterus

The signs of kernicterus are jaundice, head retraction or opisthotonus, expressionless facies, random eye movements, changes in muscle tone (either becoming hypertonic or hypotonic), cyanotic attacks, a refusal to suck, vomiting, and alteration in the Moro reflex.

There appears to be a relationship between the level of the newborn's serum bilirubin and the appearance of kernicterus. In 229 newborns with erythroblastosis, Hsia, et al¹ found that kernicterus commonly occurred when serum bilirubin rose above 30 mgm. per cent, but not when the serum bilirubin remained below 20 mgm. per cent. It was their policy to attempt to keep the bilirubin level below 20 mgm. per cent in each case, doing multiple exchange transfusions if necessary. In a series of over 200 consecutive newborns with erythroblastosis so treated, they encountered no cases of kernicterus.

At one time kernicterus was thought to be associated only with erythroblastosis, and that physiologic jaundice of either full term or pre-

mature infants was benign and of little significance. In 1950, however, two groups of workers, Aidin, et al² in England, and Zuelzer and Mudgett³ in this country, independently drew attention to the occurrence of kernicterus unassociated with erythroblastosis.

Aidin, et al² in their series of infants who died, reported ten instances of erythroblastosis associated with kernicterus, and twenty-four premature babies with kernicterus in whom no evidence of iso-immunization was found. The macroscopic appearance of the brains was indistinguishable in the two groups. Clinically, all the premature infants showed well marked physiologic jaundice. He concluded by stating that prematurity associated with physiologic jaundice and with the characteristic signs of kernicterus seems to be a definite entity not previously described. Similar observations were made by Zuelzer and Mudgett.³

Pathogenesis of the Disease

The post-mortem appearances of kernicterus have aroused much speculation as to the metabolism of the breakdown products of hemoglobin and the pathogenesis of the disease. Many suggestions have been made. Claireaux, et al⁴ in 1953, produced convincing evidence that whatever else has occurred, the pigment in the brains of these infants at autopsy is bilirubin. Day⁵ in 1954, gave an indication of the possible mode of action of bilirubin. He showed experimentally that oxygen uptake of brain tissue from decapitated rats was depressed by 25 per cent when saturated with indirect bilirubin in concentrations of 20 mgm. per cent. Thus it appears that indirect bilirubin is the causative factor of kernicterus, whatever the mode of production of the hyperbilirubinemia.

In 1956, Meyer⁶ reported that in his studies on prematures without erythroblastosis the incidence of kernicterus was related to the level of bilirubin. At his premature unit in England, of some 350 serums tested in the course of the investigation, only 20 were over 18 mgm. per cent, and of those, twelve babies had kernicterus. Other investigators have also shown that kernicterus occurs most commonly when the serum bilirubin rises to unusually high levels, even though there is not a critical level above

*From the Department of Pediatrics, University of Louisville School of Medicine, and the Louisville Children's Hospital, Louisville, Kentucky. Presented at the Louisville Children's Hospital, October 25, 1956.

which all babies develop this condition.

In 1955, Crosse, Meyer and Gerrard⁷ reported on their studies of sixty premature babies in Birmingham, England who developed kernicterus in the absence of iso-immunization. Iso-immunization was excluded by a negative direct Coombs test, absence of any anomalous agglutinins and of immune anti-A and anti-B in the maternal serum, and by a negative indirect Coombs test. Jaundice was present in all sixty cases; about 75 per cent of the bottle-fed babies became anorexic and refused to suck; head retraction, expressionless face, and random eye movements occurred in 65 per cent; and muscle tone changes, vomiting and cyanotic attacks occurred in 50 per cent. Their time of onset of kernicterus was usually on the sixth or seventh day of life. Seventy-three per cent of the sixty cases died during the neonatal period, and of the survivors, all had varying degrees of neurologic sequelae.

Incidence of Kernicterus

The incidence of kernicterus varied inversely with birth weight. This finding agrees with the reports of other investigators. Cases have been reported of full term infants with kernicterus unassociated with erythroblastosis, but the number is small when compared to the number occurring in prematures.

It is commonly known that physiologic jaundice in the premature tends to be more marked than in the full term infant. Although the rise of serum bilirubin at birth and for the first day or two of life corresponds closely to that in the full term infant, the bilirubin in the premature infant continues to rise through the third, fourth, and sometimes fifth and sixth days before declining. Total serum bilirubin levels occasionally exceed 20 mgm. per cent at the peak of jaundice. This rise, however, need not be confused with that accompanying erythroblastosis, in which the rise occurs at a much earlier period.

In Figure I, a study by Meyer⁶ of ninety-three babies tallied by 500 grams birth weight differences is shown graphically. The bilirubin levels of babies weighing less than 4 lbs. 6 oz. at birth are still tending to rise on the sixth day, while those of the larger babies are falling by the sixth day. Thus the less the baby's weight at birth, the higher the post-natal bilirubinemia and the later the peak.

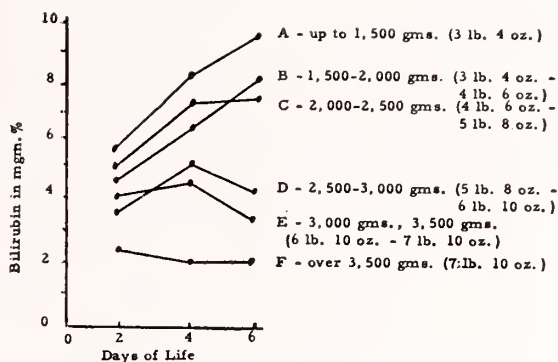


Figure 1. Mean bilirubin levels (indirect reacting) in 47 full term and 46 premature babies. (From Meyer⁶)

Other Factors in Pathogenesis

Another factor which plays a role in the development of kernicterus in prematures is the excessive use of vitamin K. In 1956, Bound and Telfer⁸ reported on their investigation of 106 premature infants with no evidence of iso-immunization. Fifty-five were given a total vitamin K dosage of 30 mgm.; that is, 10 mgm. daily for the first three days of life, and fifty-one received only a single injection of 1 mgm. on the first day. Of the first group given 30 mgm., twenty-one attained bilirubin levels of 18 mgm. per cent or higher on the fifth day, and two died of kernicterus.

Of the second group given 1 mgm., only two developed similar bilirubin levels, and none developed kernicterus. These findings have been confirmed by Meyer and Angus⁹. They found that the intramuscular injection of large doses of vitamin K caused some elevation of the serum bilirubin level of the newborn baby, whether full term or premature.

They concluded that the large doses increased the risk of the development of kernicterus in premature babies by raising the already high level of serum bilirubin. This mode of action of vitamin K is still not clear. There may be increased hemolysis, which would increase the circulating bilirubin; the vitamin may be hepatotoxic in large amounts; or there may be a combined effect. Since a single dose of 1 mgm. of vitamin K has been shown to be as effective as larger amounts in preventing hypoprothrombinemia, it was suggested that this dose be adopted for routine use.

Silverman and his co-workers¹⁰ at Babies Hospital in New York, recently reported that the use of Gantrisin® in prematures may result

in an increased incidence of kernicterus.

The Differential Diagnosis

In Table I are presented the most important facts useful in the differential diagnosis of the two forms of hyperbilirubinemia. In the second column a list of other conditions which may cause a marked elevation of serum bilirubin resulting in kernicterus is included. All the conditions are characterized by elevation largely of the indirect bilirubin.

Table I
HYPERBILIRUBINEMIA RESULTING
IN KERNICTERUS

Due to iso-immunization	Without iso-immunization
1) Rh incompatibility — Positive Coombs, anemia, jaundice within first 24 hours, mother is RH negative, baby is RH positive.	1) Most of the babies are premature.
2) Other blood group incompatibilities such as Kell, Kidd, Duffy families—Positive Coombs, anemia, early jaundice.	2) Jaundice usually noted after 24 hours of age.
3) ABO incompatibility—No one test diagnostic of this condition. Coombs test usually negative. Maternal anti-A or anti-B titers are highly variable.	3) No anemia. Hemoglobin is not reduced.
Diagnosis can be made on the basis of the following 3 criteria:	4) Negative direct and indirect Coombs test.
a) Jaundiced within 24 hours	5) Other clinical conditions associated with hyperbilirubinemia in newborns:
b) Serum bilirubin levels of 10 mgm. % or higher within 24 hours	a) Sepsis
c) Major blood group incompatibility between infant and mother. ABO setup; mother is group O and baby is group A or B.	b) Congenital spherocytosis
Early rise to peak bilirubin in first day or two.	c) Congenital familial non hemolytic jaundice.
Onset of kernicterus usually on the second to fourth day.	d) Congenital toxoplasmosis
	e) Cytomegalic Inclusion cell disease
	Late rise to peak bilirubin about the sixth day.
	Onset of kernicterus usually on the fifth to seventh day.

Conclusions

The most important predisposing factor in kernicterus of prematures without erythroblastosis appears to be immaturity, as evidenced by the birth weight and by the period of gestation.

Its incidence increases considerably as birth weight and period of gestation decrease; it is ten times more common, for example, in prematures delivered before the thirtieth week than in those delivered after the thirty-sixth week.

Hepatic immaturity would appear to be the most important underlying factor. Liver function is so immature in these babies that the indirect reacting bilirubin accumulates in the blood, rising to dangerously high levels. In the light of our present knowledge, the only certain way of eliminating kernicterus in prematures would appear to be by exchange transfusion whenever the bilirubin threatens to reach the danger level of 20 mgm. per cent. By this means the indirect reacting bilirubin is removed from the body at a time when the liver is unable to do this on its own.

As a concluding statement, based on this discussion, it is urged that all moderately or severely jaundiced premature babies should have serial bilirubin determinations, the frequency of these determinations depending on the level of bilirubin and the rate of rise of that level.

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Truth is inclusive of all the virtues, is older than sects or schools, and, like charity, more ancient than mankind.

—Amos Bronson Alcott

HISTOPLASMIN REACTIVITY IN THREE KENTUCKY AREAS

U. PENTTI KOKKO, M.D., DR. P. H.;

HOWARD DEHAVEN, M.D.;; THEO. GUIGLIA, M.D.***

Division of Preventive Medicine, Kentucky State Department of Health

KENTUCKY lies in the heart of a fairly large area where histoplasmosis occurs endemically (1,2,3), (Fig. 1). According to the results of previous skin testing surveys with histoplasmin, published hitherto from Kentucky, 753 of 1,449 or 52% of the individuals tested were positive reactors (4,5,6,7,8).

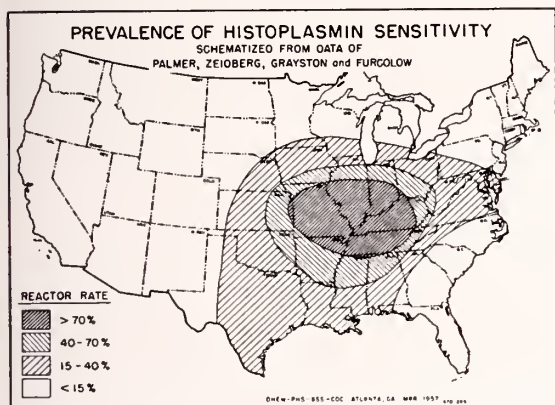


Figure 1

This high reactor rate is in sharp contrast to the fact that the State Department of Health has received reports of only 13 cases of clinical histoplasmosis, including the 7 infant cases from central Kentucky and Louisville area, published by Kotcher and Leikin (9) and McClellan et al. (10). These 13 clinical cases were distributed over the entire State from Caldwell County in the southwest to Pike County in the east and to Pendleton County in the north. All but one of the clinical cases occurred in early childhood, while most of the individuals in earlier skin testing studies in Kentucky were from selected young adults (mostly student nurses or students in Berea College).

Purpose of the Study

The intent of this study is to collect additional information on the prevalence of sensitizing histoplasma infection among the general

population of Kentucky. For this purpose, a statistically significant number of individuals were skin tested in three distinct geographical areas in the State. These areas were: Floyd County in the hilly eastern Kentucky coal mining area; Grant, Owen, and Pendleton Counties in the northern Blue Grass area; and Livingston and Marshall Counties in the southwestern, flat, level, farming area. The great majority of individuals in Floyd County were coal miners or members of their families. Most of them were tested in groups, each group representing a sub-population residing in an area fairly well separated from the neighboring communities by high hills and poor roads. The test population in northern Kentucky was the smallest in the three geographical areas; and about three-fourths of the individuals tested in this area were adult females working in small local industries (clothing manufacturing plants and dairies).

A large part of the adult population tested in southwestern Kentucky were workers in local industries. The majority of them, however, lived on farms where they had spent most of their lives and were still doing some farming in addition to their factory work; and even in cases where the family did not actually farm, they still had a flock of chickens round the house. Thus, for the purpose of this study, the southwestern group may be considered essentially as farming population.

Material and Method

The antigen used in this study was commercial histoplasmin prepared by Parke-Davis. It was diluted 1:100 each time right before usage. The test was performed by injecting 0.1 ml. of diluted antigen intradermally into the upper part of the flexor side of the left forearm. A control injection with the same amount of sterile saline was given intradermally an inch or two below the histoplasmin injection. Most of the test population also received *Trichinella* antigen as a third intradermal injection an inch or two below the site of the saline control. (The results of the *Trichinella* testing will be reported in another paper.) All the syringes

*Present Address: U. S. Department of Health, Education and Welfare, Public Health Service, Communicable Disease Center, Atlanta, Georgia.

**Present Address: Children's Hospital, Louisville, Kentucky.

***Present Address: Box 81, Letterman Army Hospital, San Francisco, California.

in this study were clearly marked, and special care was exercised to use always the same syringes with the same antigen.

Histoplasmin reactions were read 40-48 hours after the injection. Both erythema and induration were recorded. The criteria for a positive reaction were either a definite induration more than 5 mm in diameter or less definite induration with a definite erythema of more than 5 mm in diameter. It was generally easy to distinguish between a positive and a negative reaction, and the number of borderline reactions was quite small. The adults who developed an unusually strong skin reaction were questioned on the possible history of a recent or a prolonged respiratory infection or other suggestive symptoms which could explain the strong reaction. The fragmentary information

obtained this way permits no conclusions on the course of a sensitizing histoplasma infection.

The total number of individuals tested and recorded in this study is 1520: 697 from Floyd County; 253 from Grant, Owen, and Pendleton Counties; and 570 from Livingston and Marshall Counties (Tables I, II, and III).

Results

The results of the study in the three different areas are by no means uniform. Most striking is the difference of the reactor rate between the eastern coal mining area and southwestern flatland farming area. The total reactor rate in the latter area was more than 4 times as high as in the former. Particularly great was the difference in the age group of 10 to 19. In this group,

Table I
Histoplasmin Reactivity by Age and Sex in
FLOYD COUNTY

AGE	MALES			FEMALES			TOTAL		
	No. Tested	No. Positive	% Positive	No. Tested	No. Positive	% Positive	No. Tested	No. Positive	% Positive
0-9	43	0	0	52	1	2	95	1	1
10-19	116	9	8	116	5	4	232	14	6
20-29	27	6	22	60	9	15	87	15	17
30-39	64	17	27	71	16	23	135	33	24
40-49	41	19	46	41	7	17	82	26	32
50 & Over	38	14	38	28	8	29	66	22	33
TOTAL	329	65	19.8	368	46	12.5	697	111	15.9

Table II
Histoplasmin Reactivity by Age and Sex in
GRANT, OWEN, PENDLETON COUNTIES

AGE	MALES			FEMALES			TOTAL		
	No. Tested	No. Positive	% Positive	No. Tested	No. Positive	% Positive	No. Tested	No. Positive	% Positive
0-19*	6	4	67	18	7	39	24	11	46
20-49	43	33	77	151	80	53	194	113	58
50 & over	11	3	27	24	8	33	35	11	31
TOTAL	60	40	66.7	193	95	49.2	253	135	53.4

*Six females in this age group were less than 10 years old; two of these were positive.

Table III
Histoplasmin Reactivity by Age and Sex in
MARSHALL & LIVINGSTON COUNTIES

AGE	MALES			FEMALES			TOTAL		
	No. Tested	No. Positive	% Positive	No. Tested	No. Positive	% Positive	No. Tested	No. Positive	% Positive
0-19*	77	52	68	93	52	56	170	104	61
20-29	133	105	79	15	9	60	148	114	77
30-39	155	120	77	5	3	-	160	123	77
40-49	76	47	62	2	2	-	78	49	63
50 & over	8	4	-	6	4	-	14	8	57
TOTAL	449	328	73.1	121	70	57.9	570	398	69.8

*One female in this group was less than 10 years old; she was positive.

both sexes included, the difference was 10 fold, and among females almost 14 fold, i. e. 4% of the Floyd County girls were reactors vs. 56% reactor rate among the same age girls in Livingston and Marshall Counties. The reactor rate in the northern Blue Grass area is closer to that of the southwestern area than that of the eastern area, although the difference of the reactor rates between each area is statistically highly significant. In this study, the males have a significantly higher overall reactor rate than the females. Of 838 males, 433 or 52% are reactors; and from 682 females, 211 or 32% are reactors. Since the different areas and the different age groups in the study are not comparable to each other, the reactor rate by sex, by area, and by age group is shown in (Fig. 2).

HISTOPLASMIN REACTOR RATES
BY SEX AND AGE
IN THE THREE TEST AREAS

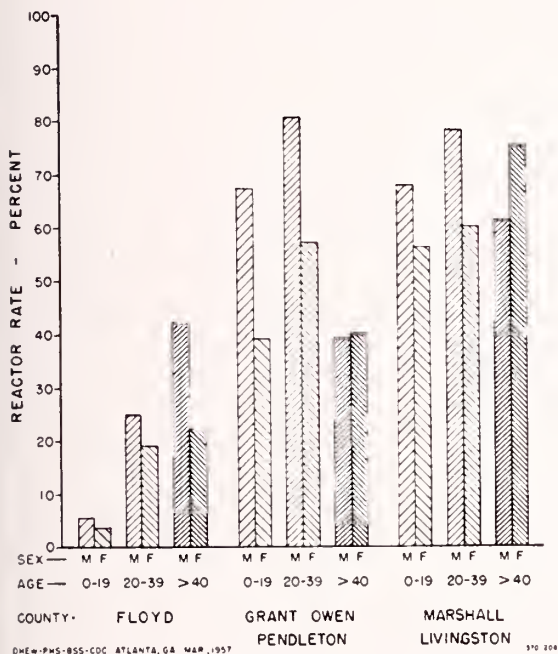


Figure 2

Discussion

The difference of the sensitizing infection rates in the present study may be easily explained by environmental factors. There is sufficient evidence that the reservoir for *Histoplasma capsulatum* in nature is in soil and particularly in soil which is contaminated by chicken (and other avian) manure (11). Extensive soil studies in Williamson County, Tennessee showed that approximately 39% of

the samples collected from chicken houses and chicken yards yielded the fungus. Inside the chicken houses, the fungus recovery rate was over 46% of the samples while in the open chicken yards, the recovery rate was 20%. In other places ("in open," "under barn," etc.), the recovery rate was much less. In one of Zeidberg's studies, *Histoplasma capsulatum* was isolated from 11% of chicken yard soils but only 4 times from 284 soil samples (1.4%) outside chicken yards; all the 4 latter isolations were "from under dwellings where chickens often nest and congregate" (3). The chicken itself is not a carrier of the fungus (12). The fungi, when injected intraperitoneally in the chicken, disappears in 6 weeks, obviously because the body temperature of the chicken is too high for the multiplication of *Histoplasma capsulatum* (13).

In Kentucky, *Histoplasma capsulatum* has been isolated from the soil at least twice. One of these isolations was made from a chicken coop on a farm in Jessamine County where an infant died of histoplasmosis (14). In southwestern Kentucky where the histoplasmin reactor rate is high, almost every family has some chickens, while in the eastern coal mining area, some communities have no chickens at all. The association with chickens, although a probable explanation for the differences of the reactor rates in this study, by no means needs to be the only explanation for the geographical variation. To the contrary, the same kind of difference has been noted, for example, in Ohio and in Kansas (1). In southwestern Ohio, the reactor rate was over 86%, and in eastern Ohio, it was 28%. In Kansas, the positive reactor rate among student nurses varied from nearly 80% in the northeastern part of the State to less than 8% in northwestern corner of the State. This variation probably is a result of multiple geographic factors such as soil characteristics and climatic conditions.

Since there is no evidence that histoplasma infection could be transmitted from one human to another, the higher reactivity among males, although statistically significant, probably has very little practical significance. It simply may be a reflection of a greater activity around the house and the farm; i.e., the chance of picking up infection increases with the frequency of contacts with infected soil. In Floyd County where the positive reactor rate among older males is much higher than among older females

(males age 40 and over: 33/79 or 42% reactors, females same age: 15/69 or 22% reactors), the sex linked difference may simply reflect the fact that the males visit the infected areas outside the home valley more frequently than do the females.

Summary

There were 1520 individuals skin tested with histoplasmin in three geographically distinct areas in Kentucky. The overall reactor rate was highest (69.8%) in the southwestern flat land farming area and lowest (15.9%) in the eastern coal mining area. The relationship of the positive reactor rate and the reservoir of the fungus in nature is discussed.

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CREDO

I do not choose to be a common man. It is my right to be uncommon—if I can. I seek opportunity—not security. I do not wish to be a kept citizen, humbled and dulled by having the state look after me. I want to take the calculated risk; to dream and build, to fail and to succeed. I refuse to barter incentive for a dole. I prefer the challenges of life to the guaranteed existence; the thrill of fulfillment to the state calm of Utopia. I will not trade freedom for beneficence nor my dignity for a handout. I will never cower before any master nor bend to any threat; It is my heritage to stand erect, proud and unafraid; to think and act for myself, enjoy the benefit of my creations and to face the world boldly and say, this I have done. For our disabled millions, for you and me, all this is what it means to be an American.

MURAL THROMBUS AND BACTERIAL ENDOCARDITIS

ROBERT S. TILLET, M.D., A.A.C.P.

Louisville, Ky.

Introduction

MURAL thrombus in the presence of bacterial endocarditis is a rare concurrence. Survey of the literature and standard textbooks reveals relatively few cases. This fact together with some interesting clinical and autopsy features of a case that recently came under my observation prompts this report.

Case Report

This 24-year-old white male had a history of rheumatic fever at the age of 15. One year after a "heart murmur" was detected by a physician. Two years ago he suddenly "blackened out" and subsequently was maintained at bed rest and given two penicillin injections both over a period of two weeks for "active rheumatic fever." He remained well until one month prior to admission to the hospital when he developed "flu and bronchitis." He was admitted to St. Joseph's Infirmary on September 1, 1956 with complaints of fever, dyspnea, chest pain and cough. On examination his temperature was 103 degrees. His blood pressure was 100/70, the pulse rate 100 per minute and a regular sinus rhythm was present. Cardiac enlargement and an apical systolic murmur with an increased first mitral sound were detected. An electrocardiogram showed changes consistent with old posterior wall myocardial infarction. A chest X-ray showed the heart to be borderline in size and mottled densities were seen in both lungs. The chest X-ray findings were interpreted as bronchopneumonia.

His red blood cell count was 3,900,000, the white blood cell count 20,350, the hemoglobin 11 grams. The differential count was; polymorphonuclears 92 per cent, 12 non-segmented forms, lymphocytes 5 per cent, monocytes 3 per cent. The sedimentation rate was 25 mm. The VDRL was negative. Urinalysis showed 1 to 3 red blood cells, 5 to 7 white blood cells and a trace of albumin. Bilirubinuria was noted by one observer.

After two weeks he was returned home to continue therapy including bed rest, salicylates and Meticorten. He remained home three

weeks, but felt weak and developed pain in the right lower extremity relieved only by lying supine with the legs straight.

He was admitted to the Kentucky Baptist Hospital on October 22, 1956. Examination then revealed slight icterus of the sclerae. The heart was enlarged, the PMI being at the left mid axillary line. The blood pressure was 100/60-20. Cardiac rate was 105. A grade IV systolic murmur was present at the mitral area. There was a grade II diastolic rumble and a loud P2. The lungs had a few coarse rales. Pain in the right leg and tenderness of the upper anterior thigh were present. Homan's sign was negative. The right dorsalis pedis pulsation was diminished. Fading "splinter hemorrhages" were observed in the finger nail beds.

The blood counts were similar to those of the previous admission. The urine now contained many red blood cells. The blood chemistries were normal including the serum bilirubin of 0.8. Quantitative Kahn was 8 Kahn units. The antistreptolysin titre was 100 Todd units. The C-reactive protein was negative. Blood cultures on 10/23 and 10/24 showed a growth of pneumococcus. A blood culture on 10/26/56 showed staphylococcus albus, coagulase negative. The electrocardiogram showed no change compared with one month ago. The chest X-ray showed generalized cardiac enlargement and "hazy markings in both lung fields probably due to congestive heart failure."

The working diagnoses were: (1) Rheumatic heart disease with mitral stenosis and insufficiency, (2) Subacute bacterial endocarditis with emboli to the right leg and kidney, (3) Possible active rheumatic pan-carditis. Aqueous penicillin, 2.4 million units daily, with streptomycin, 1.5 grams per day were started after three blood cultures were obtained. The temperature curve promptly declined to normal. Blood transfusions and digitalization using Gitaligin® were instituted. On October 30, 1956 he complained of severe pain in the left lower thoracic and left upper abdominal regions, thought to be due to splenic infarction. There were variations in the cardiac murmurs with, at times, the systolic or diastolic com-

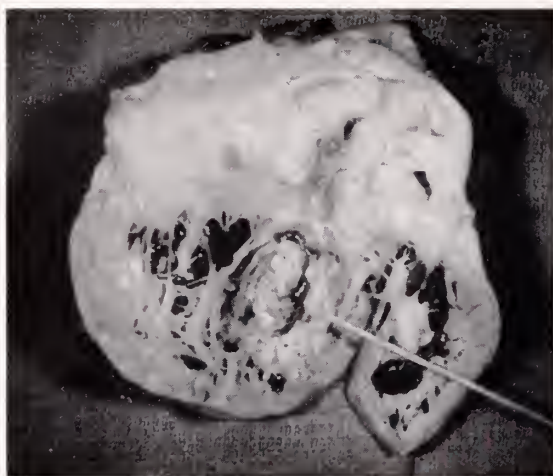


Figure 1.

The heart is opened showing the large polypoid tumor attached to the atrial wall and extending into the cavity of the left ventricle.

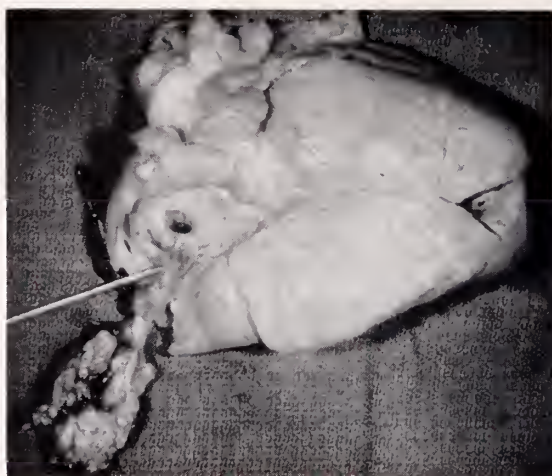


Figure 2.

The mass has been extruded from the left atrium to show more clearly its outline, appearance and its pedicle.

ponent nearly dropping out and variations in the predominating murmur. Petechia of the skin of the thorax and abdomen developed, but the Rumpell-Leeds test and blood platelets were normal. Due to coupling of rhythm, Gitaligin was stopped. On 11/10/56 he complained of numbness of the entire right side of the body and the right hand grip was weak. On 11/20/56 there was marked weakness, dyspnea and cyanosis. A loud to and fro murmur at the cardiac apex was noted at this time. The lungs were clear, the liver was markedly enlarged. He was re-digitalized and placed in oxygen. Penicillin had earlier been increased to 12,000,000 units per day. He became gradually weaker and was found dead in bed on 11/24/56.

Autopsy findings of significance were as follows: "Heart (weight 900 grams). The entire heart, but especially the left atrium and the left ventricle are enlarged. There is a small area of yellowish red discoloration resembling infarction of the posterior wall of the right ventricle. The mitral valve is thickened and fibrotic with some stenosis and the chordae tendineae are thickened and shortened. Arising just above the mitral valve on the wall of the left atrium there is a large, pedunculated polypoid mass of yellowish gray and reddish brown, rather friable material measuring approximately 2.5 by 4 cms. This polypoid mass extends through the opening of the mitral valve into the cavity of the left ventricle. The pedicle is approximately 1.5 cm. diameter. There is some adherent murothrombus in the left auricular appendage. The aortic valves are slightly thickened and

show moderate interadherence of the cusps. The aorta and the great vessels are not remarkable.

Lungs: (weight, right 350 gms., left 450 gms.): Bloody froth exudes from the cut surfaces on compression.

Liver (weight 2,250 gms.) has a marked nutmeg appearance.

Spleen (weight 600 gms.) has numerous areas of discoloration resembling infarcts. The center of the largest infarct shows cavitation.

Kidneys: Several areas of yellowish brown discoloration resembling infarctions are present.

Microscopical Sections—Heart: Sections of the large thrombus show huge masses of fibrin with some mucoid degeneration and cellular infiltration. There are a few focal areas of basophilic granular material morphologically resembling, but not diagnostic of colonies of bacteria. The underlying wall of the left atrium is thickened and fibrotic and the muscle cells widened with pleomorphic nuclei. Sections of the myocardium of the left ventricle show hypertrophy and stromal fibrosis. No Aschoff bodies are seen. Sections of the valves show considerable fibrosis and thickening. Sections of the right ventricle show a small area of infarction.

Spleen: Multiple sections of the spleen show extensive infarction necrosis but no actual sup-puration.

Kidneys: Sections show areas of infarction and in one section an embolus is seen lying in one of the arteries. The embolus is composed of basophilic, granular material resembling that described in the auricular thrombus.

Liver: Sections show severe chronic passive congestion with complete obliteration of the liver cells in two thirds of the lobules present.

Final Anatomical Diagnoses: (1) Old, healed rheumatic pancarditis with mitral stenosis and insufficiency; moderate aortic stenosis, large pedunculated mural thrombus of the left atrium extending into the left ventricle (ball valve thrombus). (2) Arterial embolization with infarction of the right ventricle, spleen and kidneys. (3) Pulmonary congestion, chronic passive congestion of the liver, spleen and kidneys. (4) Subacute bacterial endocarditis? (Clinical Diagnosis)."

Discussion

The presence of mural thrombus has been reported to be uncommon in subacute or acute bacterial endocarditis, in syphilitic heart disease and cor pulmonale. In patients with rheumatic heart disease the incidence of mural thrombus is one in three. Mural thrombus is two and one half times as common in patients with auricular fibrillation as in those with normal sinus rhythm.¹ Mural thrombus is an infrequent complication of bacterial endocarditis whether or not there is rheumatic heart disease underlying the bacterial endocarditis. The relatively infrequent occurrence of either severe mitral stenosis or auricular fibrillation in rheumatic hearts with bacterial endocarditis undoubtedly is related causally to the infrequency of mural thrombus in bacterial endocarditis.^{2,3,4}

In the case presented here neither severe mitral stenosis or auricular fibrillation was present. The large, shaggy, villous ball-valve mass that extended into the mitral orifice was diagnosed microscopically to be a rather highly organized mural thrombus. From this polypoid mass in the left auricle embolization to the heart, spleen, and kidneys occurred. The finding of embolic material resembling morphologically the mural thrombus in the arteries of the kidneys substantiates their source. There was no evidence that these were septic emboli. Nor was there evidence of non-bacterial thrombotic endocarditis present in this heart which could account for the bland emboli. Wallach and others² have found non-bacterial thrombotic lesions to be a frequent source of emboli either with or without bacterial endocarditis accompanying. Such lesions are not merely healed bacterial endocarditis or healed rheumatic endocarditis.^{5,6}

In the present case there was no conclusive evidence of active or healed bacterial endocarditis lesions on the valves. Near the surface of the large polyp or thrombus there was one questionable bacterial colony seen. The significance of the positive blood cultures obtained in this case remains open to question. These could have been contaminants. Unfortunately no bacteriological studies were done at autopsy.

Of more importance, perhaps, than the actual etiology of the mural thrombus is the feasibility of the surgical cure of such a lesion.

In the case records of the Massachusetts General Hospital as reported in the *New England Journal of Medicine*⁷ there recently appeared a discussion of a case of a nine-year-old girl whose clinical course caused a search for evidence of subacute bacterial endocarditis or active rheumatic carditis. There was no history of active rheumatic fever but epistaxis, embolic phenomena and "classic murmurs" of rheumatic mitral disease were present. At autopsy a myxoma of the left auricle with recent emboli to the brain, spleen and kidneys was discovered but there was also changes of the chordae tendineae and of the mitral valves consistent with rheumatic valve disease. The etiology of the lesion was considered by the pathologist to remain an enigma. It was pointed out that while some think that myxoma is a neoplasm, others feel that myxoma is a highly organized mural thrombus with myxomatous degeneration. The fact that so many of the cases of myxoma that have been reported were associated with thickening of the mitral valve is taken as evidence that these hearts were rheumatic hearts with large mural thrombi.

At the same clinical conference cited above,⁴ Scannell cited an instance of successful removal of a myxoma from the left atrium and this case has been reported elsewhere.⁸ The conferees postulated that, had the diagnosis been known, perhaps the myxoma in the nine-year-old girl could have been removed without disastrous embolization, which is the complication to be most feared. We believe that the same reasoning could be applied to the case presented here.

Actually, three successful removals of myxomas of the heart have been accomplished, one in Stockholm, one in Toronto and one in Boston. Other unsuccessful attempts at removal have been made in Boston, Cleveland, Philadelphia and Baltimore. Regarding mural throm-

bus, this could be difficult to distinguish from myxoma and, in fact, some believe that they are one and the same, as indicated earlier in the discussion. However, it would seem that most of the cases of ball valve thrombus would be associated with mitral stenosis, whereas those with myxomas may not be. Bland⁹ believes that a ball valve thrombus could equally well be removed surgically as a myxoma.

The pathological—physiological features of myxoma or ball valve thrombus are as follows:¹⁰

- “(1) Obstruction of left atrial flow
- (2) Left atrial enlargement
- (3) Decreased left ventricular output
- (4) Increased pulmonary artery pressure
- (5) Right ventricle and left atrium enlargement.”

Clinical symptoms suggesting myxoma of the heart are:¹⁰

- “(1) Cough, dizziness and syncope
- (2) Physical signs of mitral stenosis
- (3) Frequently, absence of history of active rheumatic fever
- (4) Increased symptoms on bending forward
- (5) Fever, petechiae, splinter hemorrhages, (i.e. embolic phenomena)
- (6) Sudden onset
- (7) Progressive right heart failure
- (8) Signs of decreased left heart output
- (9) Amelioration of symptoms on changing body position.
- (10) The electrocardiogram usually shows right ventricular hypertrophy.
- (11) Angiocardiography may show the filling defect.”

Except for number three above, “absence of history of rheumatic fever,” most of these features undoubtedly could apply equally well to mural thrombus of the heart.

“The symptoms and signs of mural thrombus or myxoma mimic:

- (a) Rheumatic heart disease

- (b) Bacterial endocarditis

- (c) Epilepsy endocarditis¹⁰

The most important feature is the changing cardiac symptoms and signs with change in body position.

Summary

A case of a large pedunculated tumor of the left auricle extending into the left ventricle with embolic manifestations of the heart, spleen and kidneys is presented. The clinical course and positive blood cultures led to the treatment as subacute bacterial endocarditis, but at autopsy no conclusive evidence of active or healed bacterial endocarditis could be determined. Evidences of rheumatic valve disease of mild degree were present. The possibility that such a lesion might be removed surgically if the diagnosis were suspected ante-mortem is discussed. The instances of three known successful removals of myxoma of the auricle are cited as an indication that mural thrombus of the ball valve type could be equally well treated surgically. Diagnostic features of ball valve tumors of the heart are reviewed.

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What art was to the ancient world, science is to the modern.—Benjamin Disraeli

CHRONIC IDIOPATHIC JAUNDICE WITH ABNORMAL LIVER PIGMENTATION: REPORT OF A CASE*

DANIEL N. PICKAR, M.D.**

Louisville, Ky.

CHRONIC idiopathic jaundice with abnormal liver pigmentation was described in 1954 by Dubin and Johnson¹ who reviewed twelve cases. It was their feeling that this is a distinct clinicopathologic entity, previously undescribed. They concluded that clinically the syndrome is a constitutional hyperbilirubinemia and histologically it is characterized by an unknown pigment in the liver cells. Also in 1954 Sprintz and Nelson² elaborated on this syndrome. They stressed the use of the needle biopsy in detecting the abnormality and discussed the differential diagnosis in detail with a presentation of four cases. They have described the liver pigment as lipochrome-like and believe it to be endogenous.

Clinically there is a persistent jaundice of varying intensity with intermittent abdominal pain which is often aggravated by an intercurrent disease. Fatigue is usually present. The urine is often found to be dark. The sclera are icteric and the liver is slightly enlarged. The entity is found in the younger age group and the prognosis appears good with a relatively benign course.

From the laboratory standpoint, the following abnormalities appear pertinent: (1) slight bromsulphalein retention, (2) hyperbilirubinemia characterized by a relatively high direct serum bilirubin of nearly 50% of the total, (3) usually an increased urine urobilinogen, (4) inability to visualize the gallbladder by cholecystography, and (5) presence of an unknown pigment in the liver cells with a predilection

for the central vein area.

Theories as to origin and nature of the syndrome have been advanced and discussed by the above authors. It is their opinion that this condition is not an obstructive, hemolytic, or inflammatory disease state. The laboratory studies and the histopathologic findings in this condition are not consistent with a chronic hepatitis as defined at the present time. By the same criteria, one is able to exclude cirrhosis, acute hepatitis sequellae, chronic cholangiohepatitis, congenital and acquired hemolytic anemias, and constitutional hereditary non-hemolytic hyperbilirubinemia (Gilbert's Disease).

Sprinz and Nelson believe that the syndrome is an inborn or acquired error of metabolism. Dubin and Johnson think it may represent one form of the many varieties of constitutional hyperbilirubinemia.

As yet the liver cell pigment, which is non-iron and non-bile staining, has not been identified. Studies indicate that the increased serum bilirubin is a true bilirubinemia.

Case Presentation

PRESENT ILLNESS: H. K. W., a 42-year-old white male cab driver was first admitted to the Neuropsychiatric Service of the V. A. Hospital, Louisville, Ky., on April 16, 1952, complaining of nervousness for a period of several years. He stated that he had been more nervous for the past three to four months, that he had been very restless, and had had insomnia. He believed he had lost about 10 lbs. in weight during the preceding few months. During the week prior to admission he had noticed considerable flatulence and abdominal distention. A review of systems was otherwise negative.

PAST HEALTH: Not remarkable. He had used cigarettes moderately and had consumed about one-half pint of whiskey per week during the previous one to two months. He stated he had taken the whiskey to relax and sleep. For seven years prior to WW II, his occupation was that of a painter. He was given a medical dis-

*From the Medical Service, Veterans Administration Hospital, Louisville, Ky., and the Department of Medicine, University of Louisville School of Medicine.

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**Assistant Chief of the Medical Service, V. A. Hospital, Louisville, Ky., and Assistant Professor of Medicine, U. of L. School of Medicine.

charge in 1945 for a gunshot wound of the left hand. Since WW II he had been employed in his local community as a cab driver working many hours, 7 days a week, in order to pay the family bills and to pay for the funeral expenses of his mother and father who died in 1950.

FAMILY HISTORY: Essentially negative. There was no history of liver or blood disorders.

PHYSICAL EXAMINATION: TPR, normal. B. P. 110/80. Weight, 165 lbs. Examination revealed a well developed, well nourished white male in no acute distress. The examiner stated that the sclera appeared icteric although he did not describe any jaundice of the skin. Examination of the abdomen revealed no abnormalities. It was the opinion of the Neuropsychiatric Service that the patient had (1) anxiety reaction (depressive type) and (2) jaundice, cause unknown.

Psychotherapy was commenced but because of the presence of jaundice the patient was transferred to the Medical Service for study on 4-21-52.

LABORATORY DATA: Patient's laboratory work consisted of the following studies carried out at about monthly intervals from April 28, 1952 to January 10, 1953:

Kahn negative. Sedimentation rate on two occasions, 5 and 8 mm/hr. Blood count: RBC and hemoglobin normal; WBC varied from 4400 to 7500, with a normal differential on all occasions. Serum bilirubin on 10 different occasions showed a level varying from 2.6 mgm. per cent to 6 mgm. per cent. On all occasions the direct reaction was strongly positive except on May 26, 1952 when the total serum bilirubin was 2.6 per cent and the direct reaction was negative. Total cholesterol was 147.5/100 ml. of serum, with cholesterol esters of 89.3/100 ml. of serum. Urobilinogen gave the following results: 7.5 Ehrlich units on April 28, 1952, 0.7 Ehrlich units on June 23, 1952, 2.2 Ehrlich units on July 22, 1952 and 3.3 Ehrlich units on August 12, 1952. Cephalin flocculation on April 28, 1952 was 0/++++. The cephalin flocculation carried out on six other occasions during his first hospitalization was reported as 0/0 on three occasions and 0/+ on three occasions. Alkaline phosphatase on three occasions was 1.4 Bodansky units, 7 Bodansky units and 3.8 Bodansky units. Inorganic phosphorus

was 2.8 mgm per cent. Routine urine examinations on three occasions gave normal results. The urine contained bile on some occasions and none on others. A study of red cell fragility was normal on three different studies. Prothrombin time on six occasions was normal. A glucose tolerance test gave normal values. Heterophile agglutination was positive in 1 to 112 dilution on May 2, 1952. Gall bladder x-ray showed no concentration of the dye and no visualization on June 12, 1952 and, with a double dose of Priodax,[®] there was no visualization on June 25, 1952 and July 22, 1952.

COURSE IN THE HOSPITAL: While on the Medical Service the patient was on bed rest for the first month and thereafter was allowed to be ambulant. He was placed on a high carbohydrate, high protein, and low fat diet. A liver biopsy was performed on July 29, 1952.

He continued to feel better and was less nervous. He asked for a leave of 30 days which was granted on August 20, 1952. He returned after 8 days because of pain in the right upper quadrant, nausea and vomiting. It was thought that his sclera were more icteric. He had had no chills or fever. Examination of the abdomen revealed considerable tenderness in the right upper quadrant with guarding which persisted for four or five days along with nausea and vomiting.

He was transferred to the Surgical Service on September 2, 1952. An exploratory laparotomy was performed on September 5, 1952 at which time a cholangiogram, an appendectomy and a liver biopsy were done. The cholangiogram was normal. The liver was described as slightly enlarged and greyish black in appearance.

Postoperatively he improved rapidly and he was placed on leave on November 6, 1952 from which he returned on January 3, 1953. He stated that he had gained 10 lbs. in weight and that he had had no digestive or abdominal complaints. His sclera still appeared slightly icteric. Following a short period of observation and study he was discharged from the hospital on 1-10-53.

The patient was re-admitted on May 25, 1955, for follow-up studies. He stated that he continued to tire easily but had no specific complaint except for the waxing and waning of his jaundice at three or four month intervals

during which time the urine would vary in color. His stools remained essentially normal in color. His weight was maintained at about 170 lbs.

LABORATORY DATA:

Na, 142 mEq/L; K, 4.04 mEq/L; Cl, 104.5 mEq/L; Ca, 5.05 mEq/L; HCO_3 , 26 mEq/L. WBC, 7000; P 63, L 30; Hb., 16.4 gms. per cent. Sedimentation rate, 10 mm/hr. Blood amylase, 66.4 units; fasting blood glucose, 76.3 mg. per cent; urine, normal; VDRL, negative; prothrombin, normal; cephalin flocculation, 0/0; BSP, 20.3% retention in 30 minutes, 17.2%, retention in 45 minutes; Blood protein, 7 gm. (4.41 gm. albumin, 2.59 gm. globulin); Alkaline phosphatase, 2.8 Bodansky units.

Coomb's test direct and indirect—negative.

Serum bilirubin:

direct	1 min.	2.	mgs. %
	15 min.	2.45	mgs. %
indirect		1.25	mg. %
Total		3.70	mg. %

Fecal urobilinogen: 70 Ehrlich U/100 gms.—4 day specimens. (50-250 Ehrlich U/100 gms. is normal)

Urine urobilinogen: 4 specimens in 24 hrs. varied from 2.98 to 4.73 Ehrlich units.

Urine porphyrin: 4 specimens in 24 hrs. showed only a slight increase.

Protein electrophoresis gave an essentially normal pattern.

X-RAY STUDIES:

Chest: Normal, other than minimal emphysematous changes.

Gallbladder series: (Using intravenous Cholografin®)—The patient was given 40 cc. of Cholografin intravenously, and serial films were taken at 10 minute intervals, beginning 20 minutes after the injection of the Cholografin. These films were taken over a period of two hours without any evidence of visualization of the contrast media in the gallbladder or in the duct system. A 24 hour film was obtained, and the contrast media was visualized in the gallbladder revealing multiple small radiolucent stones. The duct

system was not visualized on this examination. Impression: Multiple radiolucent stones in the gallbladder.

Five days later on May 4, 1955: Cholecystography (using Telepaque®) was performed. The gallbladder did not visualize, nor was there any visualization 24 hours later. There was no evidence of radiopaque stones in the area of the gallbladder. Impression: Non-visualization of the gallbladder with Telepaque.

On May 9, 1955, the patient had a cholecystectomy. Grossly the liver was slightly enlarged and greyish black in color. A liver biopsy was taken from the left lobe. Three days postoperatively he had a serum bilirubin of 13 mg. per cent. On May 23, 1955, a cholangiogram was done by dye injection into the T tube. No abnormality was noted.

The removed gallbladder was described as forest green in color with a thickened wall. It contained numerous soft calculi, which were felt by the pathologist to be cholesterol in origin. Microscopically all layers show mild chronic inflammation with many Luschka ducts in the neck.

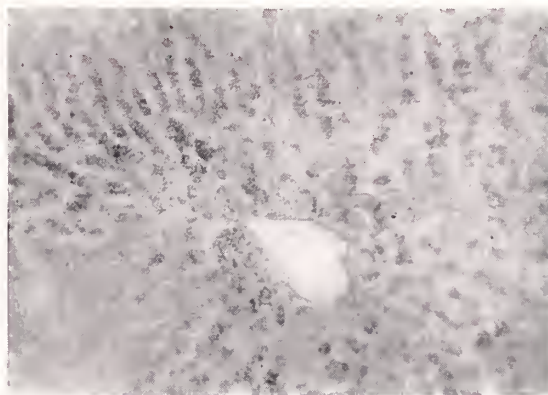


Figure 1

Photomicrograph of Liver Section showing abnormal pigment.

Microscopic examination of the liver showed the pigment throughout most heavily deposited in the central vein area. There was only a minimal fibrosis between the lobules and in the portal area. Bile ducts showed no abnormalities. The pigment did not take an iron or bile stain. There was no distortion of liver architecture (See Figure 1.).

The patient was discharged from the hospital May 24, 1955.

The patient has been seen in follow-up re-

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peatedly and he has continued to show a variable low grade jaundice. He seems to be essentially asymptomatic, however, and has been working regularly as a poolroom manager.

Discussion

This is the only patient with this syndrome on whom the gallbladder was visualized. This was accomplished only with Cholegrafin and visualization was noted 24 hours after the dye injection. The gallbladder did not visualize with the use of Telepaque or Diodrast. This should be kept in mind in the future study of this syndrome. It is felt on the basis of our studies that the liver is able to excrete the dye but only in a sluggish fashion.

The liver biopsy taken at the time of the cholecystectomy showed no changes in the microscopic findings in comparison with the one taken three years previously. This is consistent with the benign unchanging character of the disorder.

The development of cholelithiasis is interesting and is the only one of all reported cases to show this finding. We are of the opinion that this is not a part of the disease entity.

The liver pigment is non-iron and non-bile staining. Our research department has been un-

able to further clarify the true nature of the pigment.

Summary

A case of chronic idiopathic jaundice with abnormal liver pigmentation has been presented. This is an entity which is easy to diagnose by histological examination. A high index of suspicion, however, should result from the clinical behavior of the case which is usually characterized by a persistent but variable low grade jaundice with a minimum of associated symptoms or incapacity.

The pathogenesis of the disease, the mechanism of occurrence of the hyperbilirubinemia, and the identity of the abnormal pigment in the liver are as yet unknown.

It is important that physicians, surgeons and pathologists be familiar with this entity because of the benign clinical course which the disorder follows in comparison with other jaundice states with which it might be confused.

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Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KSMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words, and the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month — day of month if weekly — and year. The Journal of the KSMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. If illustrations are submitted with a paper, The Journal will assume the

cost for the first three one-column width half tones. The cost of additional illustrations will be borne by the essayist.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

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Please mail your scientific articles to The Journal of the Kentucky State Medical Association, 1169 Eastern Parkway, Louisville, Kentucky.



CASE DISCUSSIONS

From The
University of Louisville Hospitals



A CASE OF CEREBRAL ANEURYSM

LOUISVILLE GENERAL HOSPITAL

PRESENTATION: Elliott P. Stevens, M.D., Resident in Medicine.

L. G.*, a 63-year-old right-handed white female day worker, presented at Louisville General Hospital with the complaints of weakness of the right extremities and "semi-consciousness."

She was last observed well by her employer around 11:00 P.M. on February 9, 1957. At 8:00 A.M. on February 10, 1957, retching noises were heard coming from her room and she was found vomiting a thin yellow liquid, unable to understand or speak. She was described as being semiconscious. The patient was brought to the emergency room at 9:30 A.M. the same day.

PAST HISTORY: In 1912 the patient had pulmonary tuberculosis which became arrested. A hysterectomy for uterine myomata was performed in 1939. Vascular hypertension was discovered in 1951 and from that time until the present she complained of frequent bitemporal, bioccipital dull headaches. In 1955 the patient was treated for a myocardial infarction with several weeks bed rest. Her recovery had been good and other than headaches she had been symptomless until the present.

PHYSICAL EXAMINATION: Temperature 99.6° F., pulse 72 per minute, respirations 20 per minute and blood pressure 240/120. The patient was a well nourished, stocky female who was awake, but unable to understand or express herself. The head and eyes were turned to the right and retching movements were made occasionally. To gross threat no hemianopic field defects were noted.

There were bilateral early choked discs with numerous large circular retinal hemorrhages more marked on the left side, where they partially obscured the disc. She had weakness of the right extremities, estimated to be a 100 per cent loss in the right arm and a 20 per cent loss in the right leg. Movements of the right lower

face were impaired. Reflexes were diminished on the right side and there was a suck, snout and bilateral plantar extensor response. Skin, mucous membranes, lymphnodes, ears, nose and throat were normal. The neck was supple and the thyroid was not enlarged. The chest was clear. The normal size heart had a sinus rhythm and a faint systolic murmur at the apex. The second aortic sound was accentuated and louder than the second pulmonic sound. No abdominal visceromegaly was noted. The pelvic and rectal examination were normal except for the absence of a uterus.

HOSPITAL COURSE: By 10:00 A.M. on February 10, 1957 the patient had become more alert, somewhat euphoric, was able to speak and understand and the focal neurologic signs had cleared. She complained of severe throbbing bifrontal headaches and stiff neck. Lumbar puncture revealed an opening pressure of 430 mm. with uniformly grossly bloody fluid, containing 850,000 red blood cells per cubic mm. The hemoglobin was 15 gm. and the white blood count was 22,500 with 84 per cent polymorphonuclear and 16 per cent lymphocytes. Blood non-protein nitrogen was 52 mg. per cent, chlorides 106 mEq./L. and carbon dioxide 23.1 mEq./L. Urinalysis showed a specific gravity of 1.012, trace of albumin, negative sugar and a rare white blood cell. Electrocardiogram indicated evidence of an old posterior wall myocardial infarction. The chest x-ray was normal.

By February 12, 1957 the patient was more alert but still complained bitterly of frontal headaches, neck stiffness and blurred vision. Bilateral sixth nerve palsy and an increase in the retinal hemorrhages were noted. Her blood pressure ranged between 150/70 to 192/92.

She continued to complain of headaches of diminishing severity and developed no further neurological or medical signs until February 23, 1957. At this time vision had become much worse and she could no longer read ordinary

* (LGH No. 298825)

newsprint. By February 25, 1957 she had only light perception and was for all practical purposes blind. Fundusoscopic examination showed the retinae and discs to be obscured by profound vitreous hemorrhages.

Serial electroencephalographic studies beginning on February 12, 1957 showed diffuse mild slowing with no definite focal abnormalities. Skull roentgenograms disclosed a calcification measuring 17 mm. in diameter at the inner table in the midfrontal region. On February 27, 1957 a right carotid arteriogram revealed a small blob of contrast media on the anterior communicating artery. The patient withstood this procedure without mishap and except for poor vision gradually became asymptomatic by March 1, 1957. She was treated conservatively with bed rest for the next few weeks, until March 20, 1957 when a repeat right common carotid arteriogram was performed which again showed an aneurysm of the anterior communicating artery, without any evidence of other vessel involvement.

On March 26, 1957 a craniotomy was performed. A small mid-line meningioma measuring one and a half inches in diameter was discovered attached to the inner table of the skull about three inches from the bridge of the nose. In addition, an aneurysm about six mm. in diameter was found on the anterior communicating artery. The aneurysm was excluded from the rest of the circulation by means of silver clips. The entire operation was performed under hypothermia with the body temperature around 88° F. and a commensurate fall in blood pressure.

Following operation the patient did extremely well, seemed to be euphoric, but oriented and had no focal neurologic signs except for bilateral sixth nerve palsy and poor vision.

After discharge from the hospital on April 24, 1957 her bilateral sixth nerve palsy cleared and vision improved. Last examination on June 11, 1957 showed considerable residual vitreous hemorrhage, but her vision had improved so that one inch high letters could be read. There were no focal neurologic signs except for persistent euphoria.

Discussion

Richard C. Turrell, M.D., Assistant Professor of Neurology.

The patient presented to us by Dr. Stevens was a perplexing problem during the first five days of admission. Essentially, she represented

the problem of an acute remittent right hemiparesis associated with subarachnoid bleeding. Utilizing her history and the first part of the hospital course we can localize her initial lesion. She had a selective right hemiparesis, which was most marked in the arm, and was unable to understand or express herself. The latter represents a dysphasia (inability to understand or use the spoken word) and was probably falsely labeled as "semiconsciousness." These findings point to a large superficial lesion nourished by the left middle cerebral artery in the left hemisphere.

Because of the acuteness of her illness, the rapid clearing of her disability and the fact that her initial lesion anatomically fit the distribution of a blood vessel, it was felt that she was suffering from a vascular lesion. In order to explain the transient nature of her initial symptomatology some type of vascular insufficiency has to be invoked. This insufficiency may have been due to an unobserved grand mal seizure at the onset of her illness, and in this case would have been called a Todd's or exhaustion paralysis. The other possibility was that she had a vascular spasm of the middle cerebral artery associated with disease of the middle cerebral artery. The retinal hemorrhages, vomiting, early choked discs, plus bloody spinal fluid under increased pressure indicated that the patient was suffering from a hemorrhagic lesion in her central nervous system. After the first 30 minutes of hospitalization there were no good focal neurological signs, and perhaps this was a clue that pointed toward more silent areas of the brain, such as the prefrontal or temporal lobes. Disease of the temporal lobes could probably be excluded on the basis of normal visual field examination, and would direct our attention back to the prefrontal areas.

One clue, both anatomical and etiological, which was missed early in the course of her illness, was the fairly characteristic circular retinal hemorrhages (1). These hemorrhages are different from those commonly seen in ordinary cases of papilledema, hypertension or in blood dyscrasia. They are found almost exclusively in cases of subarachnoid hemorrhage, develop rapidly and may be observed within a short time after the onset of bleeding. The hemorrhage is often large and since it may overlay the edge of the optic disc, must lie between the retina and the hyaloid membrane;

hence, the term, "subhyaloid" hemorrhage. In most cases subhyaloid hemorrhages are found accompanying ruptured aneurysms of the anterior part of the circle of Willis, where the blood is directed into the anterior portion of the subarachnoid space. Most observers believe them to be secondary to sudden obstruction of the venous return from the retinae, due to subarachnoid bleeding and choking off of the vaginal sheath around the optic nerves. By the same mechanism papilledema can develop very rapidly. In our particular patient the hemorrhages and papilledema were recognized within a few hours after the onset of her illness.

Other symptoms that pointed to frontal lobe difficulties were the severe throbbing frontal headaches and euphoria. Up to this point we are left with the differential diagnosis of subarachnoid hemorrhage in the anterior portion of the circle of Willis. Since there was no evidence of external trauma the possibility of head injury was excluded as a cause for subarachnoid bleeding.

The majority of spontaneous subarachnoid hemorrhages are produced by ruptured congenital aneurysms. Other causes for spontaneous subarachnoid hemorrhages include broken arteriosclerotic blood vessels, arteriovenous malformations, mycotic aneurysms associated with bacterial endocarditis and sometimes hemorrhagic blood dyscrasias. Hemorrhagic blood dyscrasias were excluded by the absence of bleeding in the mucous membranes or skin. The absence of petechiae, rheumatic fever history and significant heart murmur would eliminate the possibility of a bacterial endocarditis, which is usually associated with mycotic aneurysms. Our problem then became one of deciding whether the patient had a congenital vascular malformation, congenital aneurysm, or an arteriosclerotic aneurysm.

Taking up our studies chronologically, one of the first performed was an electroencephalogram which showed a mild diffuse encephalopathy, but no good localizing findings. In previous experience (2) at Louisville General Hospital with 95 cases of spontaneous subarachnoid hemorrhage, the electroencephalogram was of great help in lateralizing the site of bleeding. This was done by noting a decrease in the electrical brain activity on the side of the lesion during the first week of illness. After serial electroencephalograms in this patient failed to show a characteristic lateralizing ab-

normality it became apparent that the lesion was close to the midline of the brain. In a negative sense therefore the electroencephalogram was of help.

Skull x-rays showed a large calcification attached to the inner table of the skull in the mid-frontal region which did not suggest calcification in the ordinary type of aneurysm. This might have represented an arteriovenous malformation, but these malformations are somewhat unusual in the anterior circulation. In retrospect this calcification represented an unrecognized, and probably asymptomatic, meningioma which was found later at operation.

Common carotid arteriograms were performed twice to make doubly sure that the patient did have an aneurysm along the anterior communicating artery and to rule out any other vascular anomalies which might be present. Multiple aneurysms are present in ten to fifteen per cent of the reported cases (3).

After the diagnosis of aneurysm of the anterior communicating artery was established it was difficult to decide on a course of management. There is apparently no uniform agreement on how to manage such lesions (4). At present a study is being undertaken by the National Institute of Health on the natural history of subarachnoid hemorrhages and aneurysms, utilizing non-surgical as well as surgical methods of treatment. This program will continue for the next five years and may give us some answers as to what to do in a given situation of subarachnoid hemorrhage.

Ideally a cerebral aneurysm should be excluded or removed from the circulation if the operative mortality is low and the patient does not suffer any additional neurologic deficits from the procedure. Most agree that fatal recurring hemorrhages from aneurysms of the cerebral vessels tend to occur soon after the initial rupture. The danger from a second hemorrhage is greatest in the first four or five weeks after the initial rupture (1). With this reasoning some neurosurgeons advocate early surgical exclusion of the aneurysm from the circulation (5). If this cannot be done ligation of the carotid artery in the neck on the side of the lesion is considered the next best procedure. On the other hand there are those who believe that conservative or non-surgical therapy should be used in all cases of subarachnoid hemorrhage due to congenital aneurysm and point to

(Continued on Page 831)

SPECIAL ARTICLES

INFLUENZA*

LEROY E. BURNEY, M.D.**

DURING recent weeks the eyes of the medical profession have been on the influenza epidemic which swept through the Far East. Thus far only sporadic outbreaks have occurred in this country, affecting several thousand people. Experts in the field say there is little question that we will have an epidemic in this country sometime during the fall and winter months.

Since 1948 the Influenza Study Program sponsored by the World Health Organization has maintained a system of reporting specific diagnoses of influenza in the United States, Canada, South America and Europe.

The current epidemic was first reported in Hong Kong and Singapore in late April, 1957. Epidemic followed rapidly in Taiwan, the Philippines, the Malay States, Japan, India and other areas. Virus sent to this country for antigenic analyses were found to be type A, but antigenically different from any previously known A strains in the hemoagglutination inhibition test. Animal anti-sera prepared against type A strains did not inhibit or neutralize the new variant and no protective antibody could be demonstrated in sera from human beings repeatedly vaccinated with previously prevalent type A virus.

Information to date suggests that little protection against the new virus is gained by previous vaccination with existing influenza vaccine.

Beginning June 2 a series of influenza outbreaks were reported among ships which had been berthed in Narragansett Bay, Newport, R. I. Spread of the epidemic was erratic. Subsequent infections have been reported in San Diego, Monterey, Davis and San Francisco,

Calif., Cleveland, Ohio; Lexington, Ky.; Valley Forge, Pa.; Salt Lake City, and Grinnell, Iowa.

Clinical and Public Health Aspects

The experience in Asia and in the United States provides no basis for predicting an increase in severity of infection in the coming fall and winter or during the next year or two. The present concern arises largely from the possibility that a more virulent variety of the Asian type may emerge. The severity of the 1918 epidemic is believed to have been due to some mutation which exposed the population to a virus or viruses radically different antigenically from those strains to which they had been previously exposed.

Influenza is usually characterized by abrupt onset, prostration, fever up to 104, headache, myalgia, cough and sore throat. X-ray examinations of the chest usually show no abnormal findings. Leukopenia is common in uncomplicated cases. The febrile period usually lasts 3 to 5 days, following which the patient may complain of extreme weakness for several more days.

In laboratory diagnosis of individual cases, the virus may be isolated from secretions of the nose and throat early in the course of the illness. The procedure consists of inoculating chicken eggs which have been incubated for about ten days, and recovering the virus in the fluids of the embryonic sac.

Paired specimens of blood, one taken in the acute phase and the other 10 days to two weeks later, may be used for serological tests. A four-fold or greater rise in antibody titer is regarded as an indication of influenza infection. Since neither of these laboratory procedures can be completed while the patient is still acutely ill, they are of little value to the physician in prescribing treatment. Such tests are necessary, however, to confirm the presence or absence of influenza in a community.

*This article is made available by the AMA as part of the informational program on the Asian influenza epidemic in the interest of reaching as many physicians as possible.

**Surgeon General, U. S. Public Health Service, Dept. of HEW

Immunological Aspects

Studies in the military reveal that a properly conditioned vaccine is 70 per cent effective under epidemic conditions and that reactions to the vaccine are quite rare. Individuals known to be sensitive to egg are *not* given the vaccine since virus is grown in embryonated eggs.

The manufacturers of vaccines are able to produce a satisfactory monovalent vaccine (containing the Asian strain) in sufficient quantity for civilian use this winter. They are currently working on a large-scale production basis.

Present Considerations

Isolation of causative virus has been made prior to the appearance of influenza in the United States; thus for the first time in history we are in the fortunate position of being ahead of an impending epidemic of influenza. It seems probable that influenza will continue to spread for the remainder of the summer months but will not be highly epidemic in this country until fall or winter when outbreaks may be anticipated. While the disease will probably be mild there is always the outside possibility of a repeat of the 1918 epidemic. There is a further possibility that the virulence of the infection as reflected in case-mortality rates will increase. Even though these are still only possibilities, any preparations which need to be done to meet these eventualities must be accomplished now. After a pandemic starts it will be too late.

At the invitation of the WHO, a plan for investigation of influenza outbreaks in foreign countries has been developed by the influenza commission of the Armed Forces Epidemiological Board. Teams making the studies will be particularly interested in determining (a) the properties of the virus, (b) complete clinical descriptions, (c) whether a bacterial component is associated with the illness, and (d) epidemiologic aspects.

The American Medical Association has already announced a program designed to offset the severe strain placed on medical personnel when so many people suddenly become ill.

Finally, in recent years the nature of influenza in this country has not warranted the use of influenza vaccine except on a group

basis to minimize absenteeism or in so called priority groups. However, the present influenza epidemic, with its rapidity of spread and high attack rate is sufficiently unusual to press for immunization against the new strain of influenza virus. As a properly constituted vaccine is the only preventive for this disease, the Public Health Service with the Association of State and Territorial Health Officers and the American Medical Association plans to promote the use of the vaccine as soon as it becomes available. To accomplish this we plan to embark upon an educational and promotional campaign to encourage all persons who want it to seek influenza vaccine on a voluntary basis. Any such campaign must be conducted in an orderly fashion to avoid confusion and hysteria in the public and will call for the combined efforts of all of us.

Summary

1. Influenza has been known for centuries under a variety of names but except for the pandemic of 1918, the illness was regarded lightly.

2. For the past twenty-five years it has been possible to incriminate certain strains of Type A virus and Type B virus as causative agents of cyclic outbreaks of influenza.

3. The current epidemic in the Far East and sporadic outbreaks in the United States and elsewhere are caused by a new strain of Type A virus popularly known as the Far East strain.

4. There is a distinct probability that the current influenza epidemic will increase and develop into pandemic proportions by late fall or winter. Also there lurks the possibility of an increase in virulence of the infection as reflected in case-mortality rates.

5. A properly constituted vaccine containing the new strain of type A virus represents the only preventive tool at our command.

6. Influenza vaccines have been proven effective and safe in controlled studies conducted by the military.

7. The Public Health Service, in cooperation with the State and Territorial Health Officers and the American Medical Association will stimulate and promote a nationwide voluntary program of vaccination against the prevalent strain of influenza.



EDITORIALS



BLUE SHIELD AND THE MEDICAL SOCIETY

EVERY doctor has a personal responsibility for the success of his Blue Shield Plan, and a direct opportunity to take part in its control. For the first basic requisite of any nonprofit prepayment plan that wants to use the name and symbol "Blue Shield" is that the plan be formally and continuously approved by the state and county medical societies in its area of operation.

Another requirement, no less basic, is that a Blue Shield Plan's medical policies and schedules of payment be determined by physicians.

Blue Shield is, in fact, our own chosen mechanism for making our service more readily available, through prepayment, to our patients.

As such, one would expect the relations between all Blue Shield Plans and their sponsoring medical societies to be as intimate and understanding as between the members of any well-run family.

A recent survey conducted jointly by the Public Relations Department of AMA and the Professional Relations staff of the Blue Shield Medical Care Plans indicates that relationships between the Plans and their local medical societies in general are excellent, and they have improved most notably in the last few years.

Similar questionnaires sent simultaneously to the Plans and medical societies brought prompt responses from 75% of the Plans and 78% of the societies. Of these respondents, 94% of the Plans and 89% of the medical societies reported good or excellent relations with one another. The interesting fact that in three cases the Plans thought their relations with the medical society were excellent while the society reported them to be poor, and in three other cases the contrasting opinions were reversed, only proves that we are dealing with people.

When this questionnaire probed a little deeper into the specific character and methods of liaison, however, it revealed some sizable area of weakness and some attractive opportunities for improvement.

For example, only 51% of the responding Plans and 58% of the medical societies reported that they maintain "a specific liaison committee" between them. That some of these committees have not exactly rendered conspicuous service is suggested by the fact that in six cases the Plan and the medical society disagreed as to the very existence of a liaison committee between them. As might be expected, there was a very strong correlation between the areas where liaison committees are operating and the areas where the mutual relations are of the best.

Other specific questions related to jointly-sponsored meetings for doctors' office assistants, the inclusion of the Blue Shield information in the medical society's orientation program for new members; the settling up of co-operative mechanisms for the use of the medical society mediation committees to handle patient complaints; and jointly-sponsored indoctrination programs for the medical students, interns and residents. In each of these areas of potential cooperation, a majority or a very sizable minority of the respondents reported no action as yet. However, we are glad to report that Kentucky is one of the states where these suggestions have been rather satisfactorily implemented.

If the American doctor needs Blue Shield, it is equally true—if not more so—that Blue Shield needs the American doctor. Without his guidance, Blue Shield might become something quite different from what the profession wants it to be. Without the doctor's support and active participation, there would not even be a Blue Shield, and those of us who practiced before there was a Blue Shield plan can assure you that the economic and professional advancements have been amazing from the standpoint of both patient and physician.

J. Duffy Hancock, M.D.
President, Kentucky Physicians Mutual, Inc.

PEACEFUL WORDS AND PEARL HARBORS

Optometrists Write to Each Physician in Kentucky

EARLY in December 1941 Japan's Ambassador to the United States was mouthing peaceful words in Washington as Japanese planes attacked our Pacific assets. In July 1957 Kentucky Optometrists sent graceful resolutions to each Kentucky physician, as their national representatives pressured the Subcommittee on Hospitals of the House Committee on Veterans Affairs to report for passage, a bill (H.R. 6719 "A Bill Granting Pay Increases in the Department of Medicine and Surgery of the Veterans' Administration") carrying a small "section 5" amending present V.A. statutes by placing optometrists on the same professional level as physicians.

In this same summer Kentucky optometrists* placed two column display ads in the Lexington Herald, the Mt. Sterling Advocate, The Courier-Journal, The Louisville Times, The Lebanon Enterprise, and The Woodford Sun, frequently stating, "Look for this seal (of the Ky. Optometric Association) on your doctor's door. . . It's your assurance of the best professional eye care." This year optometrists again importuned the pioneering and distinguished Southern Regional Educational Board of the 16 compacting Southern States, to dignify their programs by undertaking a study of ocular care in the south. They used LIFE Magazine (May 27, pp. 126-40) to spread apparent confusion in regard to ocular physiology, the magazine *Oral Hygiene* (April, 1957 pp. 37-40) to alarm dentists about the everyday use of their eyes, and "Letters" in the Kiplinger Magazine, *Changing Times* (July 1957, p. 48) to discredit school vision tests.

No fringe group has engineered a more thorough or longer range program to confiscate a segment of the body. Organizing only two years before the turn of the century, they launched a legislative campaign in 1900 to secure licensed or legalized status in every state, proclaiming themselves by legislative definition—rather than academic attainment—"a learned profession." The first such state bill was passed in Minnesota in 1901, the Kentucky Act was not passed until 1920, but by persistent efforts every state

and finally the District of Columbia in 1924 was brought into conformity with their national plan.

The year their stormy legalizing program was secured, they began a subtle invasion into highway problems with a motor vision project in New York in 1924 and in Michigan the next year. Every state has now felt the insinuating hand—sometimes officially, often un-officially—of organized optometry in driver testing. Inevitably, this has led to some economic advantages and at other times abuses in referral procedures. This year and in the forthcoming State legislature, Kentucky is receiving a major push for "professional eye examination" by optometrists to insure highway safety. Display ads (as in Clinton Co. News June 6, 1957) have been published, the State Safety Commissioner and members of the National Safety Council have been feted, and a multiple unit display adjacent to booths of the State Department of Public Safety is scheduled for the State Fair in September.

The pattern of optometric laws passed between 1901 and 1924 has always been to exempt physicians from their provisions—in essence, seeming to allow physicians and surgeons to treat the eye by virtue of *exemptions* in the optometric acts. In 1954, optometrists began a program to tighten up and eliminate exemptions—eye physicians and their technicians—in each state. At the Annual Congress of American Optometric Association (Seattle, June 20-23, 1954) the following resolution was passed: "The field of visual care is the field of optometry and should be exclusively the field of optometry."

These are the patterns, the actions and the deeds of optometry. Their words and their literature will be more welcome and effective when their deeds correspond to the spirit of their words.

Caveat Emptor

Arthur H. Keeney, M.D.
Louisville

* In the name of their "Vision Conservation Institute of Kentucky" P. O. Box 804, Lexington, Kentucky.

Opinions expressed in contributions to *The Journal* are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.



ORGANIZATION SECTION



Color TV, Exhibits, Panel, Speakers Highlight Annual Meeting

Scientific sessions featuring top notch national guest speakers, color television originating from General Hospital, exhibits of useful scientific and technical information, 12 specialty group sessions, a panel discussion, the President's Luncheon, class reunions at the U of L, and the annual golf tournament are only some of the varied highlights that combine to make the 1957 Annual Meeting program one that no physician in the state will want to miss, according to Richard R. Slucher, M.D., KSMA president.

A feature presentation of the meeting will be the eight and one-half hours of color television which will relay a series of diversified programs from General Hospital to the Columbia Auditorium.

Another colorful highlight of the program will be the panel discussion on "Hyperthyroidism" moderated by Alton Ochsner, M.D., of New Orleans and including prominent local and national speakers.

This year the Kentucky Public Health Physicians have joined the ranks of specialty groups bringing the number of groups meeting during the Wednesday afternoon session to 12.

"Ropes of Gold" is the subject of the talk Dr. Kenneth McFarland, nationally known lecturer and educator, will give at the President's Luncheon on Wednesday at 12 noon on the Roof Garden of the Brown Hotel. This year the system of color tickets is being discontinued and 325 tickets will be sold—with seating arrangements on a first come, first serve basis.

There will be a display of 10 scientific exhibits of interest to the general practitioner, as well as to the physician who limits his practice. Questions on what's new and different in allied fields may be answered by visits to the 65 technical exhibits showing the latest development in pharmaceuticals, medical literature, instruments, equipment and services.

Class reunions, held at the U of L, in conjunction with the Annual Meeting will provide interest for some, while sportsmen will be interested in the annual golf tournament at the University of Louisville.

For full details on the Annual Meeting be sure to read the program flyer which has been mailed to every Kentucky physician.

Ten Scientific Exhibits Planned for '57 Annual Meeting

Ten Scientific Exhibits covering a wide range of subjects will be on display at the 1957 Annual Meeting, according to Everett L. Pirkey, M.D., Louisville, chairman of the Committee on Scientific Exhibits.

The exhibits and exhibitors are:

"Blastomycosis of the Skin," Ullin W. Leavell, Jr., M.D., Lexington.

"Cassette Holder for Use in Reduction of Fractures," John T. Bates, M.D., Louisville.

"Combined Interbody and Posterior Element Fusion," W. F. Massie, M.D., Lexington.

"Major Problems in Reconstructive Surgery: Application of Basic Principles," Alberto Rigau, M.D., D.D.S., Harlan.

"Experience with the Transaminase Reaction," Harold J. Schupbach, M.D., and Frank L. Yarbrough, M.D., Owensboro.

"Missed Diagnosis," Grover Sanders, M.D., Louisville.

"Obliterative Arterial Disease of the Lower Extremity," John J. Cranley, M.D., and Raymond J. Krause, M.D., Cincinnati.

"Traction Treatment of Femoral Shaft Fractures," R. W. Augustine, M.D., Madisonville.

"Ulcers of the Legs Due to Venous Insufficiency," John J. Cranley, M.D., and Raymond J. Krause, M.D., Cincinnati, Ohio.

"Poisoning in Childhood," William Curtis Adams, M.D., University of Louisville School of Medicine.

Doctor Pirkey expressed his appreciation for the interest of members and exhibitors in the Scientific Exhibits which are a popular feature of the Annual Meeting each year.

Blue Shield Seminar Features Noted Speakers

Two nationally known authorities will be featured speakers at the Blue Shield Seminar at the Kenlake Hotel, Hardin, on Thursday evening, October 3, according to J. Duffy Hancock, president of the Kentucky Physicians Mutual which is the Blue Shield Plan for Kentucky.

"Blue Shield—The Answer to Third Party Medicine" will be the subject of a talk by L. Howard Schriver, M.D., Cincinnati. Oscar O. Miller, M.D., Louisville, will discuss "Kentucky Physicians Mutual and YOUR FUTURE."

Aimed at giving physicians at a local level the opportunity of learning more about the contributions and importance of the Kentucky Physicians Mutual to the physicians and people of Kentucky, the seminar is strongly supported by the Executive Committee of the Association.

Doctor Hancock has extended an invitation to all physicians from the first, second, third, and sixth councilor Districts to attend the meeting at the Kentucky Lake resort.

Councilors from the invited districts join in urging members of their districts to attend this worthwhile program.

COUNCIL ADOPTS AMA GUIDES FOR RELATIONS WITH UMWA AT JULY 18 SESSION IN LOUISVILLE*

The Council of the Kentucky State Medical Association held its fourth meeting of the 1956-57 year, a day long session with 23 members present, at the Brown Hotel in Louisville, Thursday, July 18.

The primary reason for calling a meeting at this time was to consider any documented evidence that any county medical society might present which would endeavor to show that the principle method of medical ethics had been violated as a result of a labor management health plan in that county.

After discussion, the Council voted to adopt the following "suggested guides to relationships between state and county medical societies and United Mine Workers of America and Retirement Fund" as passed by the House of Delegates of the American Medical Association at its Annual Meeting in June 1957.

1. All persons, including the beneficiaries, of a third-party medical program such as the UMWA Fund, should have available to them good medical care and should be free to select their own physicians from among those willing and able to render such service.

2. Free choice of physician and hospital by the patient should be preserved:

a. Every physician duly licensed by the state to practice medicine and surgery should be assumed at the outset to be competent in the field in which he claims to be, unless considered otherwise by his peers.

b. A physician should accept only such terms or conditions for dispensing his services as will insure his free and complete exercise of independent medical judgment and skill, insure the quality of medical care, and avoid the exploitation of his services for financial profit.

c. The medical profession does not concede to a third party such as the UMWA Welfare and Retirement Fund in a medical care program the prerogative of passing judgment on the treatment rendered by physicians, including the necessity of hospitalization, length of stay, and the like.

3. A fee-for-service method of payment for physicians should be maintained except under unusual circumstances. These unusual circumstances shall be determined to exist only after a conference of the liaison committee and representatives of the Fund.

4. The qualifications of physicians to be on the hospital staff and membership on the hospital staffs is to be determined solely by local hospital staffs and by local governing boards of hospitals.

Following long and careful discussion, the following motion was unanimously carried.

"It is the opinion of this Council of the Kentucky State Medical Association that the hospitals operating under the Miners Memorial Hospital Association and the physicians employed by the Memorial Medical Associates are not

complying with the principles enunciated in "suggested guides" submitted by the Committee on Medical care of Industrial Workers adopted by the House of Delegates, American Medical Association, and this Council."

As a final action on this general subject the Advisory Committee to the UMWA was urged to continue its efforts to resolve the unsolved problems in connection with labor management health plans.

A report made by a special committee headed by Emmett F. Horine, M.D., Brooks, the official KSMA Historian was accepted by the Council. The report had to do with portraits owned by the Kentucky State Medical Association that are presently hanging in the Health Department. Disposition of these portraits due to the moving of the Headquarters Office of the Association from the Department of Health Building to the Medical Arts Building was indicated.

The portraits of A. T. McCormack, M.D. and Philip E. Blackerby, M.D., both past Commissioners of Health and past Secretaries of the Association should be given to the Health Department. The portraits of Ephraim McDowell and the portrait of J. N. McCormack (hanging in the lobby) it was recommended would be placed on display in the Kentucky Historical Society on exhibition with the title of these pictures remaining with the Kentucky State Medical Association.

The Council voted to accept proposed plans for revamping the pension agreement covering the full-time Headquarters Office personnel. The change was made due to the difficulty of trying to set up and operate a "qualified" pension agreement.

Efforts to bring to a halt the activity of a Chicago physician who is soliciting the doing of urinalysis by mail were discussed. It was reported that the Post Office Department had found no infraction of the law. The Health Commissioner, however, agreed to look into the matter further and see if anything could be done.

Developments in the Governor's Commission on Indigent Medical Care, looking toward the drafting of a bill for consideration by the 1958 Legislature, was discussed by the Health Commissioner. He pointed out that the Federal Government has available for Kentucky on a matching basis the sum of three million seven hundred and fifty thousand dollars for care of the indigent in this state. The Council was also told that the Committee on Medical Education and Economics was having a special meeting to consider this matter and to make recommendations.

The question of whether or not it would be to the advantage of better medical care in Kentucky to have a Basic Science Law was discussed at some length. The Health Commissioner reported that the results of a survey of 22 states that had this law were mixed and inconclusive. No action was taken until more information on this subject could be studied.

The Council heard a request from H. L. McPheeters, M.D., Commissioner of the State Department of Mental Health, which sought the support of the Association for a conference next Spring which was

*As authorized by the 1956 session of the House of Delegates, the Journal of the KSMA is presenting a digest of minutes of the July 18 meeting of the Council of the KSMA.

designed to encourage high school students to become interested in health careers. The Council voted to support this effort.

Plans for the KSMA exhibit at the State Fair were explained and proposed plans for an exhibit at the 1958 State Fair were discussed and a study authorized.

A recommendation from the Board of Directors of the Kentucky Chapter of the Academy of General Practice that all non-profit hospitals be required to accept from 10 to 15 percent of their patient role as indigent was presented. This recommendation was referred to the KSMA legislative committee with the request that it study the matter and report at an early date.

It was decided that the next meeting of the Council would be held on September 16 just prior to the meeting of the House of Delegates.

Rooms for Specialty Groups Assigned by Dr. Slucher

Specialty group room assignments for the Wednesday afternoon session of the 1957 Annual Meeting have been announced by Richard R. Slucher, M.D., Buechel, KSMA President.

Following are the assignments:

Kentucky Society of Anesthesiologists—First Christian Church, Young People's Lounge, Second Floor.

Kentucky Chapter—American College of Chest Physicians, First Christian Church, Forum Classroom, Second Floor.

Kentucky Eye, Ear, Nose and Throat Society—Columbia Auditorium, Reference Committee Room.

Kentucky Chapter, American Academy of General Practice—Columbia Auditorium, Main Auditorium.

Kentucky Obstetrical and Gynecologic Society—Calvary Episcopal Church, Sunday School Assembly Room.

Kentucky Orthopedic Society—Columbia Auditorium, Women's Lounge, Basement.

Kentucky Chapter, American Academy of Pediatrics—First Christian Church, Assembly Room, Downstairs.

Kentucky Chapter, American College of Physicians—First Unitarian Church, Breaux Hall, First Floor.

Kentucky Psychiatric Association—First Christian Church, Sunday School Assembly Room, Main Floor.

Kentucky Public Health Physicians—Columbia Auditorium, Basement Lounge.

Kentucky Radiological Society—First Christian Church, Lydia Powell Room, Second Floor.

Kentucky Chapter, American College of Surgeons—Columbia Auditorium, Second Floor Ball Room.

Ky. Blue Cross-Blue Shield Assume Responsibility

The Kentucky Blue Cross and Blue Shield Plans, pursuant to an agreement with the receivers of the Cumberland Valley Hospital Association and Cumberland Valley Surgical and Medical Care, Inc., have assumed responsibility for the operation of these two

plans and are pleased to be able to continue protection until affairs are settled, according to D. Layne Tynes, Executive Director of the Kentucky Physicians Mutual and Kentucky Blue Cross.

Under the agreement, Blue Cross-Blue Shield will service policies and pay benefits in accordance with the terms of certificates issued by the Cumberland Valley groups.

Mr. Tynes said that all claims should continue to be sent to the Cumberland Valley Hospital Association, P. O. Box 670, in Pineville and he thanked the physicians for their cooperation during this period.

Months of Preparation Needed for Color TV Program

Months of preparation go into the 8½ hours of closed circuit color television which will be a feature presentation of the 1957 Annual Meeting according to Rudolf J. Noer, M.D., professor and head of the Department of surgery at the University of Louisville, who is chairman of the Committee on Color Television.

Planning started early in the year when the Committee on Scientific Assembly first contacted Smith, Kline and French regarding the use of their color television facilities. Then the work of Doctor Noer and his assistants on the committee, James C. Drye, M.D., and Beverly Towery, M.D., Louisville, started.

Numerous group meetings have been held in preparation and chairmen of the various portions of the program have gone over the parts with those participating.

Representatives of Smith, Kline and French were in Louisville in August to study the set-up of Louisville General Hospital where the programs will originate. They also held meetings with the committee and discussed the various techniques to be used.

They will return to Louisville about a week before the Annual Meeting to set up their equipment and to meet with all participants. The program director will go over a cue sheet with each individual participant to show how his part in the program may best be adapted to TV.

A dress rehearsal of the more complex parts of the program will be held.

To make the program possible, temporary separate power lines have to be set up, a large 18 ft. trailer truck installed at the General Hospital, a large surgical and control room and a small viewing room made ready in the hospital. Then a projector and screen have to be set up at the Columbia Auditorium enabling the closed circuit to be run from the hospital.

Readership Survey in This Issue

To help the editor and staff in their continuous efforts to improve the Journal of KSMA, the officers of the association urge the cooperation of all members of the Association in filling out and returning the Readership Survey in this issue.

DOCTOR

we need your opinion

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Four Papers to be Presented at KAGP Seminar

Four KSMA members will present papers at the Kentucky Academy of General Practice Big Sandy Post-Graduate Seminar at the Paintsville Country Club on October 3, according to Frank L. Duncan, M.D., of the KAGP's Education Committee.

Physicians presenting papers are:

McHenry S. Brewer, M.D., instructor in surgery at the University of Louisville, "Benign Conditions at Esophageal-Gastric Junction."

Daniel E. Mahaffey, M.D., associate in surgery at the University of Louisville, "Tracheal-Esophageal Fistulae—Their Diagnosis and Treatment."

John A. Petry, M.D., instructor in obstetrics and gynecology at the University of Louisville, "Sterility and Infertility."

John L. Wolford, M.D., Louisville, "Complications of Acute Myocardial Infarction."

A round table discussion of the papers presented will be conducted following the dinner and social hour. The four featured speakers will participate in the discussion. The seminar starts with registration at 2 p.m.

GP's to Get Credit for TV

Notice has been received that the color television program at the Annual Meeting has been accepted as Category I credit for members of the Kentucky Academy of General Practice.

Cards on which KAGP members may record attendance at these sessions will be available at the registration desk. Developed by the faculty of the University of Louisville School of Medicine, the color television programs will give a maximum of 8 hours credit in Category I. The entire KSMA program is accepted in Category II.

Newest Products on Display at Technical Exhibits

Sixty-five technical exhibitors will offer physicians attending the Annual Meeting the opportunity to learn about the newest therapeutic products, medical literature, equipment and services available to the medical profession, according to W. O. Johnson, M.D., chairman of the Committee on Technical Exhibits.

Doctor Johnson expressed the appreciation of KSMA for the important contribution made to the Annual Meeting by these exhibitors.

The 1957 exhibitors are:

Abbott Laboratories
A. S. Aloe Company
Ames Company, Inc.
Ayerst Laboratories
Baker Laboratories, Inc.
Blue Cross Hospital Plan
Burroughs Wellcome
Burton Parsons & Co.
Carroll-Dunham-Smith Co.
Central Pharmacal Co.
Ciba Pharmaceutical Products
Coca Cola Co.

Crocker-Fels Co.
Dick X-Ray Co.
Doho Chemical Co.
Eaton Laboratories
C. B. Fleet Co.
General Electric Co., X-Ray
Guide of Prescription Opticians of Kentucky
John Hancock Ins. Co.
Hoffman-LaRoche, Inc.
Johnson and Johnson
Kay Surgical, Inc.
Lanier Co.
Lederle Laboratories
Eli Lilly and Co.
J. B. Lippincott Co.
Logan Co. (Sealy)
McNeil Laboratories, Inc.
J. A. Majors Co.
Malkin Instrument Co.
Maltbie Laboratories
S. E. Massengill Co.
Mead Johnson and Co.
Medical Protective Co.
Merck Sharp & Dohme
Massachusetts Indemnity & Life Insurance Co.
Wm. S. Merrell Co.
Miller Surgical Co.
C. V. Mosby Co.
Nordmark Pharmaceutical Laboratories
Ortho Pharmaceutical Corp.
Parke Davis and Co.
Pfizer Laboratories
Reynolds Tobacco Company
Robins Company, Inc.
Ross Laboratories
Sandoz Pharmaceuticals
Schering Corp.
Julius Schmid, Inc.
G. D. Searle & Co.
Smith, Kline and French Laboratories
E. R. Squibb and Sons
Theo Tafel
Tru-Fit Surgical Appliance Co.
U. S. Tobacco Co.
Upjohn Co.
U. S. Vitamin Corp.
Vanpelt and Brown
Warner Chilcott Laboratories
White Laboratories, Inc.
Winthrop Laboratories
Max Woche & Son
Zimmer Manufacturing Co.

AMA Award to Credo Author

The Credo which appears on page 800 in this issue was written by Henry Viscardi, Jr., of West Hempstead, N. Y., who received the AMA's seldom-awarded citation for distinguished service by a layman at the Association's meeting in New York in June.

Mr. Viscardi, who was born without legs and was unable to walk until his late twenties, is founder and president of Abilities, Inc., a company employing several hundred handicapped persons.

Anesthesiology Section Head Named at U of L

Eugene H. Connor, M.D., formerly director of anesthesiology at Philadelphia General Hospital and



assistant professor of anesthesiology at the University of Pennsylvania, has been appointed professor of anesthesiology and head of the anesthesiology section at the University of Louisville School of Medicine.

Doctor Connor, who is scheduled to assume his new position on October 1, received his M.D. degree from the University of Maryland School of Medicine in 1945. He interned at the University of Maryland and took his residency there and at the University of Pennsylvania Hospital in Philadelphia.

From 1946-7 he served as a captain in the Army assigned to the USAF at Wright Field in Ohio. Doctor Connor is a member of the American Society of Anesthesiologists.

Second Fall Clinical Conference Starts October 25

The Second Fall Clinical Conference conducted by the Lexington Clinic will be held on Friday and Saturday, October 25-26, in the Lafayette Hotel, Lexington.

A Symposium on Hypertension, moderated by W. E. Herrell, M.D., on Friday morning will include the following speakers and subjects: C. H. Fortune, M.D., "General Aspects"; J. L. Stambaugh, M.D., "Ocular Manifestations"; J. A. Harris, M.D., "Hypertension of Renal Origin"; A. L. Cornish, M.D., "Cardiac Complications and Their Management"; W. P. Wharton, M.D., "Pheochromocytoma: Diagnosis and Treatment"; P. H. Jones, M.D., "Treatment of Hypertension by Means of Sympathectomy"; and R. B. Simons, M.D., "Chemotherapy of Hypertension."

W. H. Pennington, M.D., will preside over the Friday afternoon sessions when papers by the following will be given: J. T. McClellan, M.D., "Circulatory Overload"; W. L. Cooper, M.D., "Coccygodynia"; W. L. Boswell, M.D., "Roentgen Examination of the Colon"; A. Balons, Ph.D., "Unusual Salmonella Infections"; T. R. Miller, M.D., "The Physician as a Legal Witness"; J. D. Ruff, M.D., "The Management of Chronic Lymphatic Leukemia"; Eugene Todd, M.D., "Some Errors of Omission and Commission Which Lead to Repeated Gynecologic Surgery."

Papers to be presented at the Saturday morning opening session, moderated by F. M. Massie, M.D., are: N. T. MacFarlane, M.D., and P. H. Jones, M.D., "Convulsive Disorders of Infants and Children." Participating in a Symposium on Malignant Tumors of the Head and Neck, after the intermission that morning, are: E. W. Christensen, M.D., "Carcinoma of

the Larynx"; A. B. Combs, M.D., and D. L. Boucher, M.D., "Tumors of the Salivary Glands"; J. L. Stambaugh, M.D., "Tumors of the Eye Region"; and J. B. Holloway, M.D., "Tumors of the Lip and Tongue."

STUDENT AMA

Many students have spent their entire summer at the school working on medical research under scholarships offered annually for summer work in various pre-clinical and clinical departments. The majority of students work under the auspices of the basic science departments (anatomy, biochemistry, physiology, pharmacology, and pathology). The student may elect to work on a problem of his own choice under the guidance of a faculty sponsor or may assist his sponsor in a project which this faculty member has chosen.

The scholarships are made available from funds donated from various agencies which provide support for all types of medical research and from various large local and national industries.

They are awarded by a committee of faculty members from the medical school, headed by Peter K. Knoefel, M.D., chairman of the Department of Pharmacology.

This scholarship program provides not only interesting and instructive summer work to medical students, but also contributes significantly to the amount of research which can be done at the medical school during the course of the year.

CLARKE ANDERSON, President
U of L Chapter, Student AMA

Sloan Foundation Professorship Awarded Dr. Keller

William K. Keller, M.D., professor of psychiatry at the University of Louisville Medical School and director of psychiatric services at General Hospital, has been awarded the first "Alfred P. Sloan Visiting Professorship" at the Menninger Foundation's School of Psychiatry in Topeka, Kansas.

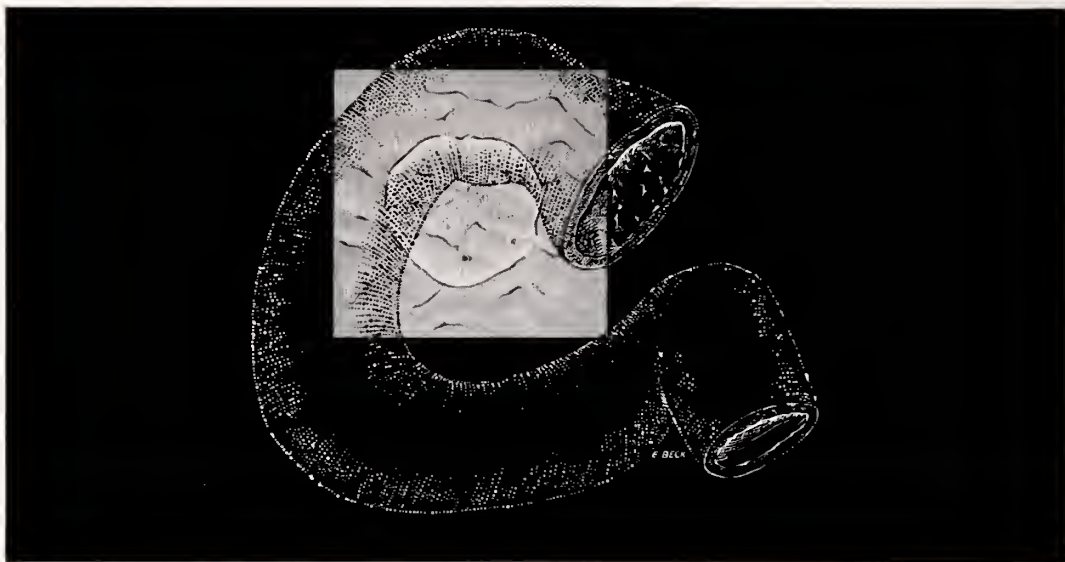
Doctor Keller, a native of Louisville and a graduate of the University of Louisville School of Medicine, will spend three months under the visiting professorship which carries a stipend of \$7,500. The professorships were established "to enrich the education and experience" of the Menninger School's fellows and faculty members "by exposing them to leaders in their profession."

The Menninger Foundation invited Doctor Keller to choose any three-month period in the next two years for his stay. Doctor Keller expects to continue his research on the effect of stress on the body while there.

Credit for GP's at AHA Session

General practitioners will receive credit for attending a special session preceding the American Heart Associations Scientific Meeting at the Hotel Sherman in Chicago on October 25. This is the first year the special session for members of the American Academy of General Practice has been presented, according to Dr. George E. Wakerlin, chairman of AHA's Committee on Professional Education.

RELIEVES THE GNAWING ACHE



Pro-Banthine® provides rapid control of pain in peptic ulcer

In a two-year study¹ by Lichstein and co-workers, documented by intensive personal observation and by follow-up studies, Pro-Banthine (brand of propantheline bromide) often brought immediate relief of ulcer pain. Patients (11 per cent) who did not respond satisfactorily to Pro-Banthine therapy had "anxiety manifestations of psychoneurotic proportions."

In addition to frequent immediate symptomatic relief, Pro-Banthine reduces gastrointestinal motility and diminishes the secretion and acidity of gastric juice, all-important factors in the generation and aggravation of peptic ulcer.

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cer healing²⁻⁵ mark the drug as a most valuable adjunct in the treatment of peptic ulcer.

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G. D. Searle & Co., Chicago 80, Illinois.
Research in the Service of Medicine.

1. Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: *Am. J. M. Sc.* 232:156 (Aug.) 1956.

2. Sun, D. C. H., and Shay, H.: *Arch. Int. Med.* 97:442 (April) 1956.

3. Rafsky, H. A.; Fein, H. D.; Breslaw, L., and Rafsky, J. C.: *Gastroenterology* 27:21 (July) 1954.

4. Schwartz, I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: *Gastroenterology* 25:416 (Nov.) 1953.

5. Silver, H. M.; Pucci, H., and Almy, T. P.: *New England J. Med.* 252:520 (March 31) 1955.

SEARLE

Dr. Shepherd New President of National Coroners

William W. Shepherd, M.D., Campbellsville, was installed as the president of the National Coroners Association at the Annual Seminar at the Sheraton-Seelbach Hotel, Louisville, August 20-24.

The group, representing 25,000 coroners from the U. S. and Canada, heard Richard R. Slucher, M.D., Buechel, deliver a welcoming address at opening sessions of the Annual Seminar. Doctor Shepherd acted as official host for the Coroners Association of Kentucky.

Outstanding speakers in many fields including, criminologists, toxicologists, and experts on automobile fatalities were on the varied program.

Doctor Dodd Appointed to U of L

Katharine Dodd, M.D., who was a featured speaker at the 1956 Annual Meeting, was appointed Distinguished Professor of Pediatrics at the University of Louisville School of Medicine effective in August, according to Alex J. Steigman, M.D., chairman of the department.

Doctor Dodd as Distinguished Professor will be freed of administrative detail and will be able to use her rich experience in the teaching of clinical pediatrics. She retired as Chairman of the Department of Pediatrics at the University of Arkansas where she spent the past five years. She has previously taught at the University of Cincinnati and at Vanderbilt.

AMA Elevates George F. Lull, M.D., In Administrative Change

The American Medical Association has announced two changes in its administrative setup.

George F. Lull, M.D., of Chicago, secretary-general manager of the association for 11 years, was elevated by the Board of Trustees to the newly-created position of assistant to the AMA president. He will continue to serve as secretary, which is an elective office. Appointed general manager was F. J. L. Blasingame, M.D., of Wharton, Texas, who will assume his new duties next January 1.

Doctor Lull, who has been in Kentucky for KSMA functions a number of times, joined the AMA staff after serving 34 years in the Army. His last military post was Deputy Surgeon General. In connection with his Army service during both World Wars, he was awarded the Distinguished Service Medal. In 1951, Cuba gave him its highest honor—the Order of Carlos Findlay—for his humanitarian work in the field of medicine.

Doctor Blasingame has been active in medical affairs, both at the state and national level, for many

years. When the AMA House of Delegates elected him a member of the Board of Trustees in 1949, he was one of the youngest physicians ever chosen.

KSMA Members Asked to Cooperate During Diabetes Week

All members of KSMA are urged to give a free urine test to any person requesting it during Diabetes Week, November 10-16, by Carlisle Morse, M.D., Louisville, chairman of the Associate Committee on Diabetes.

The Kentucky Diabetes Detection Drive is sponsored by KSMA as a public service in cooperation with the American Diabetes Association. The Diabetes Detection Drive is unique on the national, state and local levels since it involves no general fund raising and is organized and run by physicians.

All component medical societies of KSMA have been asked to name committees to implement the drive on a local level.

Members serving with Doctor Morse on the Associate Committee are: Harold K. Bailey, M.D., Ashland; George Philip Carter, M.D., Louisa; Marcus A. Coyle, M.D., Springfield; Thomas J. Crume, M.D., Owensboro; Robert J. Hoffman, M.D., Fort Mitchell; Elmo K. Hughes, M.D., Pleasure Ridge Park; Albert H. Joslin, M.D., Beaver Dam; Franklin B. Mosnick, M.D., Lexington; and Stanley T. Simmons, M.D., Louisville.

Muldraugh Hill Society Meets at Fort Knox in August

Fifty-five physicians attended the Muldraugh Hill Medical Society meeting at Fort Knox on August 8 which featured nine papers by Kentucky physicians and a film, "An Aid to Therapy," from Pfizer and Company, according to Joseph C. Ray, M.D., secretary-treasurer.

Lt. Col. Edward J. Fadell, M. C., of Fort Knox was elected president and Doctor Ray was reelected secretary-treasurer at the meeting. The society, which was founded in 1898 for scientific-social purposes, encompasses nine counties from Jefferson to Hardin.

Physicians presenting papers included: Oris Aaron, M.D., Elizabethtown; J. Thomas Giannini, M.D., Louisville; Avrom M. Isaacs, M.D., Louisville; Capt. Charles D. Behrens, M.C. Fort Knox; John J. Robbins, M.D., Louisville; John R. Smith, M.D., Louisville; Lanier Lukins, M.D., Louisville.

Donald P. Conwell of the State Department of Public Health gave a talk on the "Asiatic Influenza Virus in Kentucky."

Dr. Priddle Appointed to Board

Harold D. Priddle, M.D., Paducah, has been appointed to the Board of Consultants on Scientific Articles to fill out the term of James Ward, M.D., who has moved to Louisiana. Before coming to Paducah, Doctor Priddle had five years of post graduate training at Chicago Lying In Hospital and was associate professor of obstetrics and gynecology at Wayne University in Detroit. His term will expire July 1, 1959.

Polio Foundation Appropriations Total \$4½ Million

The National Foundation for Infantile Paralysis has announced 61 grants and appropriations totalling \$4½ million, according to Basil O'Connor, president of the Foundation.

The awards will support research to solve problems of polio and other viruses, to improve methods of polio vaccination and to develop drugs helpful in the treatment of polio and other virus diseases; research into treatment of polio's after-effects; regional polio respiratory and rehabilitation centers, and a professional education program aimed at relieving shortages of workers in health fields and raising the quality of care for polio and other patients.

Under one of the grants, Dr. Jonas E. Salk will do research on vaccines to protect the human nervous system against invasion by viruses.

Doctor Hess Named By President

Elmer Hess, M.D., of Erie, Pa., 1955 president of the American Medical Association, has been appointed by President Eisenhower as member and chairman of the National Advisory Committee to Selective Service on the Selection of Physicians, Dentists and Allied Specialists. He replaces Howard Rusk, M.D., of New York City, who had held the post since the committee's formation in 1950, when the doctor draft law went into effect.

Doctor Hess came to Kentucky twice during his year as AMA president to participate in functions of the Kentucky State Medical Association.

Break Ground for SMA Building on August 4

A. Clayton McCarty, M.D., Louisville, Chairman of the Southern Medical Association Council was one of the featured speakers at the ground breaking ceremonies for the SMA's new \$225,000 headquarters office building in Birmingham, Alabama on August 4.

More than 100 distinguished physicians from all over the south attended the ceremony which was presided over by J. P. Culpepper, Jr., M.D., President of SMA.

The building is expected to be one of the most modern and completely functional buildings of its type in the South. The cost of the building is being partly financed by contributions from members and friends of the Association.

Doctor Henson Retired

Samuel L. Henson, M.D., retired July 9 from the McCracken Health Department after 36 years of public health work. He was succeeded by Judith A. Stout, M.D., formerly of Louisville.

Known as the "dean of Kentucky health officers," Doctor Henson has practiced medicine for 43 years. He was graduated from Vanderbilt University in 1914 and first established an office at Benton. In 1931, he

became full-time health officer of Marshall County. He had served McCracken, Marshall and Livingston Counties as public health officer in 1953.

New KSMA Members

Ten new members have been added to the KSMA roster since The Journal's last report. They are:

Julius W. Bell, M.D., Jenkins.

W. L. Burke, M.D., Corbin.

Fred E. Coy, Jr., M.D., Louisville.

Charles P. Davis, M.D., Louisville.

William J. Hockaday, M.D., Louisville.

Dixon R. McCloy, M.D., Bowling Green.

Fred C. Rainey, M.D., Elizabethtown.

William D. Shidal, M.D., Elizabethtown.

Walter Sims, M.D., Bowling Green.

John Paul Stamer, M.D., Louisville.

Center Named for Dr. Barrow

The new Army Reserve Center on Russell Cave Pike in Lexington has been named in honor of David Barrow, M.D., organizer and leader of the Barrow Unit, a World War I base hospital unit in England and France.

The Barrow Unit (Base Hospital No. 40), one of the best known groups in the armed forces, was a volunteer organization formed by Doctor Barrow and other physicians as a means of helping their country in wartime.

In the Books

(Continued from Page 774)

The remaining six chapters include one on Growth and Development, Nutrition, Laboratory Procedures, History Taking and Physical Examination, General Nursing Care and Physical Therapy (including Fluid Therapy) and, finally, one on Drugs and Prescriptions.

The main purpose of the book should be for quick reference and not for a complete study of diseases of pediatrics. It is not intended to replace the larger and more complete textbooks of pediatrics. For example, the pathology of the various diseases is not included in this book. Also, there are no illustrations. Many times, particularly in diseases involving the skin and in various endocrine disorders, illustrations are very helpful.

It is an ideal book for the busy physician who needs a quick review of a pediatric problem and for the medical student working in Pediatric Clinics. This book would be a valuable addition to any medical library.

William J. Temple, M.D.

The Interstate Postgraduate Medical Association of North America is holding its 42nd International Medical Assembly at the Palmer House in Chicago from September 30 to October 3. Programs of the meeting may be obtained by writing to the Association, Box 1109, Madison 1, Wisconsin.

Plan C. T. Coleman Memorial Room

Interest in providing a room at King's Daughters Hospital in Frankfort in memory of C. T. Coleman, M.D., who died in July, is growing rapidly, according to County Judge John D. Darnell. Within a week of Doctor Coleman's death, \$125 of the necessary \$750 had been collected. Donations may be sent to Frankfort Police Headquarters or to Judge Darnell in the Franklin county court house.

1,650,000 in State Health-Insured

More than 1,650,000 persons in Kentucky are now protected by some form of insurance designed to help pay hospital and doctor bills, the Health Insurance Council of New York estimates. This represents a new high, as compared with 1,634,000 Kentuckians covered by hospital expense insurance in 1956 and 1,577,000 in 1955.

The Council's findings are based on reports of insurance programs of insurance companies, Blue Cross-Blue Shield and other health care plans.

U of L Receives Grant of \$1,750

The Ear, Nose and Throat Department of the University of Louisville Medical School will receive \$1,750 from the WHAS Crusade for Children. The new grant brings to \$3,500 the amount the Crusade has given the department, which treated indigent school children found to have impaired hearing during the Crusade for Children survey in city and county schools.

Cardiologists Meet in West Va.

"Diseases of the Coronary Arteries" will be the subject of a talk by Robert P. Glover, M.D., professor of Thoracic surgery at Temple University in Philadelphia, at a meeting sponsored jointly by the West Virginia Chapter of the American College of Cardiology and the graduate education department of the Charlestown General Hospital where the meeting will be held on October 20. All KSMA members are cordially invited to attend the meeting. There is no registration fee.

School Health Conference Set

The sixth National Conference on Physicians and Schools, sponsored by the American Medical Association's Bureau of Health Education, is scheduled for October 30-November 2 at the Moraine-on-the-Lake Hotel, Highland Park, Ill. With "A Decade of Progress In Fitness" as the theme, this year's program will emphasize the health and all around fitness of children and youth.

Discussion groups will be led by some 60 nationally recognized consultants and research persons from the fields of medicine, education and public health. State medical societies, state health and education departments and national agencies concerned with school health and health education have been invited to send representatives to the conference.

News Items

Mary Pauline Fox, M.D., of Barbourville, has completed her internship at Lexington's Good Samaritan Hospital and will practice medicine at Pineville in association with Edward Wilson, Jr., M.D. Doctor Fox was graduated from the University of Louisville School of Medicine in 1956.

Smith H. Gibson, M.D., specialist in skin diseases, has opened an office in the Doctors Building, Covington, after completing a three-year course at the Mayo Foundation and Clinic, Rochester, Minn. A veteran of World War II, Doctor Gibson received his A. B. degree from the University of Kentucky, a Master's degree from the University of Minnesota, and his doctor's degree from the University of Louisville School of Medicine. He was an intern at St. Elizabeth Hospital, Covington, in 1950-51, after which he practiced at Williamstown for three years.

James M. Dorton, M.D., began the practice of medicine in Louisa on July 15 as an associate of Hobart Lester, M.D. A graduate of the University of Louisville School of Medicine, Doctor Dorton served his internship at Springfield General Hospital, Springfield, Ohio.

Willard F. Chumley, M.D., of Hartford, started his practice in July as an associate of Oscar Allen, M.D., in Beaver Dam. He is also a member of the staff of the Ohio County Hospital. Doctor Chumley was graduated from the University of Louisville School of Medicine in 1956 and interned at Norton Memorial Infirmary.

Richard H. Segnitz, M.D. has joined the Dorton, Hyden & Moore Surgical Group in Lexington. He will limit his work to surgery of infants and children. For the past three years, Doctor Segnitz was professor of children's surgery at Marquette Medical School, Milwaukee, and assistant director of surgery at the Milwaukee County Hospital. A graduate of Harvard Medical School, he served his internship at Western Reserve University Hospital, Cleveland. He also took four years of pediatric surgery training at Children's Medical Center, Boston, and two years additional work at Cleveland City Hospital.

Walter Fox, M.D., has been named superintendent of Central State Hospital, Lakeland, after serving the past year as acting superintendent, according to announcement by H. L. McPheeters, M.D., State Commissioner of Mental Health. Prior to 1956, Doctor Fox was clinical director of the hospital. A native of Canada, he is a graduate of the Manitoba Medical College, Winnipeg. He took his psychiatric residency in Canada and at Norton Memorial Infirmary, Louisville. Doctor Fox recently became a citizen of the United States.

John Watts, M.D., who formerly practiced radiology in Bowling Green has moved to Louisville. He graduated from the University of Louisville in 1951. A native of Hallie, Doctor Watts served his internship at the Good Samaritan Hospital in Lexington and received his residency training at Veterans Administration Hospital, Louisville. He served three years in the USAF.

(Continued on Page 834)

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In Memoriam

THOMAS R. GRIFFIN, M.D.

Danville

1879-1957

A Kentucky surgeon who spent the last years of his practice in Florida, Doctor Griffin died July 21 in a Danville, Ky., hospital. He was 78.

Doctor Griffin began the practice of medicine in his native Somerset following his graduation from the Cincinnati Medical School in 1900. He moved to Danville in 1909. Later he located in St. Petersburg, Fla.

HENRY SMITH, M.D.

Rochester

1879 - 1957

A practicing physician for more than 50 years, Doctor Smith died July 30 at the Muhlenberg Community Hospital, Greenville. Death was caused by leukemia.

Born in McLean County, Doctor Smith was graduated from the Hospital College of Medicine, Louisville, in 1903. He had practiced in Rochester since his return from service with the A. E. F. in Europe in 1919.

JOHN G. SAMUELS, M.D.

Hickman

1910-1957

A heart attack claimed the life of Doctor Samuels, 47, at his home in Hickman, Ky., on July 14. He had been a practicing physician in Hickman for 21 years.

Born in Bardwell, Doctor Samuels took his pre-medical work at Murray State College and the University of Kentucky, and received his M.D. degree from the University of Tennessee Medical School, Memphis. He was president of the Fulton-Hickman Medical Society and vice-president of the Obion County (Tenn.) Hospital medical staff, and a member of the KSMA, the AMA and the Kentucky Academy of General Practice.

J. T. DISKINS, M.D.


Elkhorn City

1881-1957


One of the oldest active physicians in Eastern Kentucky, Doctor Diskins died July 12 in Pikeville Methodist Hospital at the age of 76. He had practiced in Pike County for 52 years.

Doctor Diskins was graduated from the Kentucky University Medical Department, Louisville, in 1905 and began practicing the same year in Fishtrap, Ky. In 1920 he moved to Elkhorn City. He was a member of the American Medical Association, the Kentucky State Medical Association and the Pike County Medical Society.


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IN MEMORIAM

CHARLES C. GARR, M.D.

Lexington

1884 - 1957

A retired surgeon who was one of the organizers of the Lexington Clinic, Doctor Garr died of a heart attack July 28 at St. Joseph's Hospital, Lexington. He had previously undergone emergency surgery.

The son of a country doctor in Fleming County, Doctor Garr was graduated from the Hospital College of Medicine in Louisville in 1907. During World War I he served as a major with the Barrow Unit in France. Doctor Garr was a fellow in the American College of Surgeons.

LEE CHESTNUT, M.D.

Mt. Vernon

1879-1957

Doctor Chestnut, 77, a leading physician in Mt. Vernon, Ky., for many years, died July 20 at Rockcastle County Baptist Hospital. He had been retired from active practice since 1947.

A native of Cove, Ky., Doctor Chestnut was graduated from the University of Louisville Medical Department in 1909. He taught in 11 schools in Rockcastle County before establishing his medical practice in Mt. Vernon in 1909. He was a member of the American Medical Association, Mt. Vernon Christian Church and the Masonic Lodge.

JOHN B. VONDERBECK, M.D.

Louisville

1885-1957

A staff physician at St. Anthony Hospital for more than 40 years, Doctor Vonderbeck died of a heart attack at the hospital on July 21. The 72-year-old general practitioner was first stricken in 1955.

Graduated from the University of Louisville Medical Department in 1911, Doctor Vonderbeck joined the St. Anthony staff as a young man. He was a member of the American Medical Association, the Kentucky State Medical Association, the Jefferson County Medical Society, and the American Academy of General Practice.

JESSE M. MOORE, M.D.

Princeton

1876-1957

A native of Caldwell County, Doctor Moore died July 22 at his home in Princeton, Ky., following a long illness.

Doctor Moore was graduated from the Louisville Hospital College of Medicine in 1901, and began the practice of medicine in Tolu, Ky., that year. Moving to Princeton in 1910, he continued his practice there until ill health forced him to retire. He was physician for the I. C. R. R. for 43 years.

Case Discussion

(Continued from Page 813)

statistics of survival which tend to justify their viewpoint (6).

In our patient exploratory craniotomy was performed to see if the aneurysm could be clipped without interference to the major circulation of the cerebral hemisphere. Additionally, because of the high incidence of intracerebral hematomas (7) associated with aneurysms of the anterior communicating artery, a direct look at both frontal lobes was considered desirable. If hematoma formation had been present, evacuation would have benefited the patient.

Deliberate lowering of the body temperature was used as a neuro-surgical adjuvant in this case. Recent experience with hypothermia in vascular surgery of the brain has resulted in an improved operative mortality rate (8). It has been shown that the body can be safely maintained at temperatures as low as 86° F. At this temperature brain volume decreases and complete occlusion of the cerebral circulation can be maintained up to 13 minutes without permanent neurological sequelae. As cooling progresses there is a proportionate decrease in blood pressure which greatly reduces bleeding encountered at operation.

Summary

In summary, a case of ruptured cerebral aneurysm of the anterior communicating artery is presented. Difficulties in clinical diagnosis and management are discussed. Subhyaloid ocular hemorrhages were an interesting feature which gave a clue to the etiology and location of the subarachnoid bleeding. Successful direct surgical attack was facilitated by the use of hypothermia.

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IN MEMORIAM

(Continued from Page 831)

DAVID COHEN, M.D.

Louisville

1881 - 1957

Doctor Cohen, former chief of staff at Jewish Hospital in Louisville, died July 27 at Norton Memorial Infirmary after a long illness.

A native of Jeffersonville, Ind., Doctor Cohen received his medical degree from the Kentucky University Medical Department in Louisville in 1903 and practiced medicine in Louisville for many years. He served in France during World War I.

FORREST D. HANCOCK, M.D.

Sulphur

1874-1957

Doctor Hancock, a practicing physician in Sulphur, Ky., for more than half a century, died July 22 at St. Anthony Hospital, Louisville, at the age of 83. He had been in ill health about eight years.

A graduate of the Hospital College of Medicine, Louisville, in 1898, Doctor Hancock established his practice in Sulphur, where he was to spend the rest of his life. He was a member of the Sulphur Baptist Church and the Campbellsville Masonic Lodge.

County Society Reports

Letcher County

Arthur Cooper, M.D., Somerset showed slides of his extensive work on "Fractures" at a meeting of the Letcher County Medical Society at the Pine Mountain Hotel in Whitesburg on August 13.

Forty members attended the dinner meeting in Whitesburg, according to R. Dow Collins, secretary of the Society. The next meeting of the society is scheduled for October 29 in Whitesburg.

WAYNE

One hundred physicians were scheduled to attend the annual dinner meeting of the Wayne County Society at the Hotel Breeding in Monticello on August 22, according to W. R. Kelsay, M. D., Society secretary.

Featured speakers were C. C. Howard, M. D., Glasgow, and K. Armand Fischer, M. D., Department of Orthopedic Surgery at the University of Louisville School of Medicine.

Frederick C. Reiss, M.D., announces the opening of an office in Louisville for the practice of general surgery. A graduate of the University of Louisville School of Medicine in 1952, Doctor Reiss, a native Kentuckian, interned at Louisville General and has been taking residency training at VA hospital in Louisville since 1953.

Joseph H. Humpert, M.D., has moved his office from Covington to the Columbia Federal Building in South Fort Mitchell.

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Pharmacists Elect Sebree Druggist

Carroll Bell, Sebree druggist, was elected president of the Kentucky Pharmaceutical Association at the three-day August convention of the group in Paducah.

Other officers named were: first vice president, Thomas J. Furlong, Louisville; second vice president, R. W. Leake, Danville; third vice president, Harvey Boaz, Paducah; and treasurer, J. P. Arnold, Franklin. E. M. Josey, Frankfort, was re-elected secretary for the 20th consecutive year.

Physicians planning to attend the Fourth Bahamas Medical Conference in Nassau, December 1-15, may obtain their hotel reservations by writing directly to John L. Cota, General Manager, Fort Montagu Beach Hotel, Nassau, Bahamas. (A 10-cent air mail stamp is required for a letter). Participants in the conference and their families will be given special hotel rates: \$28 per day for two persons in one room, or \$18 for one person, including breakfast, lunch and dinner. When 14 persons travel together, the air lines allow one free ticket. Twenty-seven speakers from the United States are on the conference program according to a release from B. L. Frank, M.D., Montreal, Canada, organizing physician.

Final plans for the merger of Schering Corporation and White Laboratories, Inc., two pharmaceutical companies, was announced in August. The merger will combine assets, personnel and facilities of the two companies whose products complement each other in different segments of the pharmaceutical market.

The first annual Medical Department Symposium for Combined Armed Forces Medical Department Reserve Officers under the auspices of the Commandant, Fifth Naval District, will be held October 16-18, at the U. S. Naval Hospital, Portsmouth, Va. Theme of the three-day program is "Advances In Operational Military Medicine." The symposium has been approved for retirement point credit for those in attendance who are on the Active Status List in the Armed Services Reserve Program, provided they register with the authorized military representatives assigned to recording daily attendance.

The 22nd Annual Convention of the American College of Gastroenterology will be held at the Hotel Somerset in Boston, Massachusetts, on October 21, 22, and 23. Immediately following the convention, on October 24, 25, and 26 the annual course in post graduate gastroenterology will be held at the Somerset and in the Joslin Auditorium of the New England Deaconess Hospital. Attendance will be limited to those who have registered in advance.

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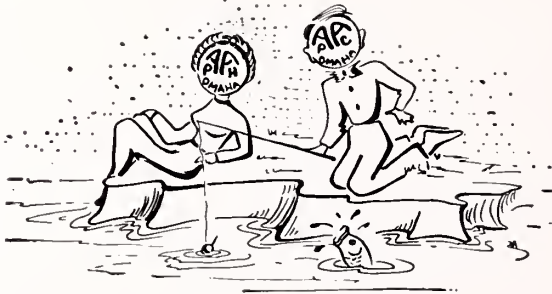
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NEWS ITEMS

(Continued from Page 827)

Arthur J. Shulthise, M.D., has moved from Preston Highway, Louisville, to a new office in the Bittersweet Shopping Center in Buechel.

Edwin H. West, M.D., a native Mississippian, has been named the new head of the Kentucky State Health Department's Division of Occupational Health. Doctor West who has been with the Health Department for more than two years, graduated from Tulane Medical School in 1937 and has held public health positions in Mississippi and Arizona.

Alec Spencer, M.D., West Liberty, has been appointed a member of a commission to deal with the economic future of Eastern Kentucky by Acting Governor Waterfield. The newly appointed group will be the executive arm of the Citizens Advisory Committee on Eastern Kentucky which has 200 members from 32 counties.

Norman K. Cohen, M.D., a native of Central City, has become associated with Armand E. Cohen, M.D., Louisville, in the practice of Allergy. A graduate of the University of Louisville Medical School in 1953, he served his internship at St. Joseph Infirmary, medical residency and Fellowship in Cardiology at Louisville General Hospital. He completed his residency training in Allergy at the University of Michigan Hospital, Ann Arbor.

Kenneth P. Haywood, M.D., a 1956 graduate of the University of Louisville Medical School, has become associated with the Trover Clinic in Madisonville. Doctor Haywood, a native Kentuckian, interned at the University of Texas Medical Branch in Galveston.

R. J. Philips, M.D., a graduate of the University of Louisville Medical School in 1948, has opened an office in Owensboro after completing four years of training as a surgeon at Thayer General Hospital in Nashville, Tennessee. Doctor Philips interned at Good Samaritan Hospital in Lexington.

E. Coleman Whitaker, M.D., a surgeon, has moved from Louisville to Berea, where he will be associated in practice with H. C. Jones, M.D. A graduate of the University of Louisville School of Medicine, Doctor Whitaker was commanding officer of the U. S. Army's 62nd Field Hospital at Lesum, Germany, during World War II. After the war, he was assistant chief of surgery at the Veterans Hospital at Lake City, Fla.

John C. Burris, M.D., has opened an office in Morgantown after completing his internship at the Good Samaritan Hospital, Lexington. He is a graduate of the University of Louisville School of Medicine.

William D. Shidal, M.D., a pediatrician, and Fred C. Rainey, M.D., a general practitioner, are now associates at the Elizabethtown Clinic. Doctor Shidal, a resident in pediatrics at Louisville's St. Joseph Infirmary the past two years, was graduated from the University of Louisville School of Medicine in 1953 and interned at St. Elizabeth Hospital, Covington. He served four years in the Army Air Corps. Doctor Rainey, a native of Nashville, received his medical degree from the University of Tennessee College of Medicine. He has practiced in Memphis and was associated for a time with the Florida State Health Department.

B. McWhorter, M.D., opened an office in Ashland July for the practice of internal medicine and radiology. A graduate of the University of Louisville in 1946, Doctor McWhorter interned at General Hospital in Louisville and took his residency training at Children's Hospital in Louisville and Cincinnati General Hospital.

Michael Wiedman, M.D., who graduated from the University of Vermont College of Medicine in 1954, is now associated with the Wainer Clinic in Providence. Doctor Wiedman interned at the D. J. Meyer Memorial Hospital in Buffalo, New York and did his graduate work at Harvard Medical School.

Harold B. Barton, M.D., who will limit his practice to surgery and surgical diagnosis, has opened an office in Corbin. A graduate of the University of Louisville School of Medicine in 1952, Doctor Barton has spent the past five years doing post graduate training at General Hospital where he was chief resident surgeon last year.

William D. Epling, M.D., formerly of Russell Springs, has become associated with John C. Baker, M.D., of Lexington, replacing Sam O. Hodges, M.D., who is taking his surgical residency at St. Joseph's Hospital in Lexington. Doctor Epling, a graduate of the University of Louisville School of Medicine in 1954, interned at the Good Samaritan Hospital, Lexington.

Charles Peck, M.D., has started a practice in Russell Springs. A graduate of the University of Louisville School of Medicine in 1956, Doctor Peck interned at St. Joseph's Hospital in Dayton.

Elizabeth Pedersen, M.D., a missionary in India for many years, is replacing Margaret Smythe, M.D., who has been granted a year's leave of absence, on the staff of the Berea College Hospital. A native of Columbus, Ohio, Doctor Pedersen graduated from the University of Pennsylvania's Medical College of Pennsylvania in 1923 and interned at City Hospital, Cleveland. She took a five month course in tropical diseases in London following her internship.

Valter Sims, M.D., a graduate of the University of Kansas in 1943, has joined the staff of the Graves-Gilbert Clinic in Bowling Green. Doctor Sims, who interned at Baptist Memorial Hospital in Memphis and took his residency training at the University of Arkansas Hospital and Medical Center in Little Rock, Arkansas, will limit his practice to radiology and isotopes.

Dixon R. McCloy, M.D., who has joined the staff of the Graves-Gilbert Clinic in Bowling Green, will limit his practice to general surgery. Doctor McCloy, a graduate of the University of Arkansas in 1951, interned at Philadelphia General and took his residency at the Cleveland Clinic. He is a veteran of the USAF.

Nelson Rue, M.D., a graduate of the University of Louisville School of Medicine in 1956, has become associated with the Graves-Gilbert Clinic in Bowling Green. He interned at St. Elizabeth Hospital in Dayton, Ohio.

Merl Napier, M.D., a native of Harlan who graduated from the University of Louisville School of Medicine in 1956, has opened an office in Munfordville. Doctor Napier completed his internship at St. Mary's Hospital, Evansville, Indiana.

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1. Locket, S.: Brit. M.J.
1:809 (Apr. 2) 1955.

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2. Wright, W. T., Jr., et al.: J. Kansas
M. Soc. 57:410 (July) 1956.

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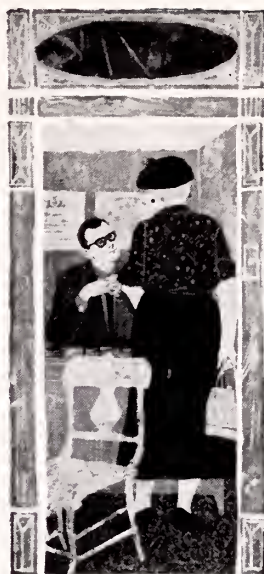
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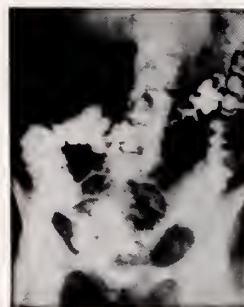
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In postpartum breast engorgement the rationale of therapy is explained as follows: During pregnancy, the high estrogen titer exerts an inhibitory effect on the anterior pituitary, thereby preventing the release of the lactogenic hormone, prolactin. Postpartum, the estrogen level drops off suddenly, and allows the release of previously inhibited prolactin which is now free to initiate the flow of milk. Sex hormones re-establish pituitary inhibition, thus arresting the lactating process.

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Bibliography: Available on request.

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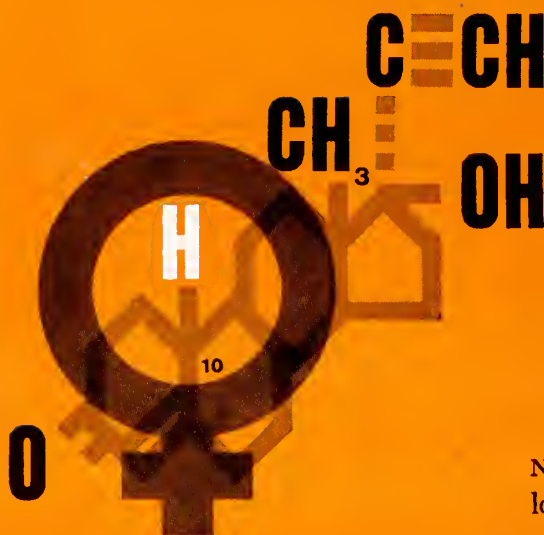
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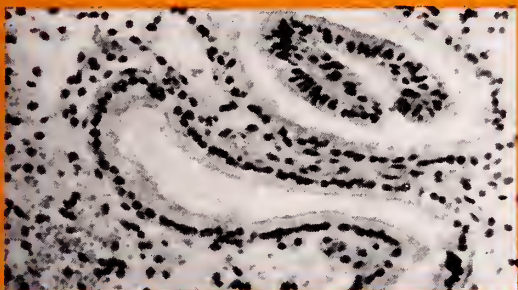


REFERENCES: (1) Hertz, R.; Tullner, W., & Raffelt, E.: *Endocrinology* 54:228, 1954. (2) Greenblatt, R. B.: *J. Clin. Endocrinol.* 16:869, 1956. (3) Hertz, R.; Waite, J. H., & Thomas, L. B.: *Proc. Soc. Exper. Biol. & Med.* 91:418, 1956. (4) Tyler, E. T.: *J. Clin. Endocrinol.* 15:881, 1955. (5) Greenblatt, R. B., & Clark, S. L.: *M. Clin. North America*, Philadelphia, W. B. Saunders Co. (Mar.) 1957, p. 587.

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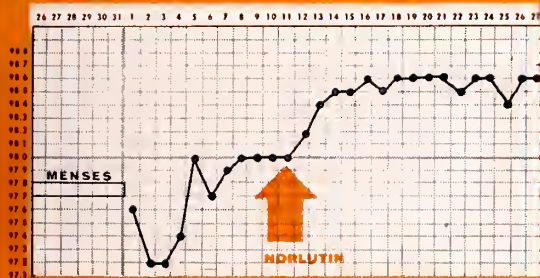


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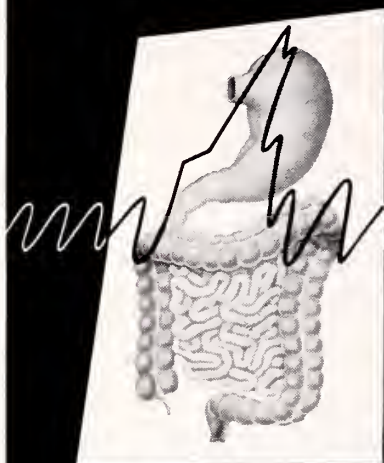
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*Ferguson, J. T., and Linn, F. V. Z.: Antibiotic Med. & Clin. Therapy 3:329, 1956.



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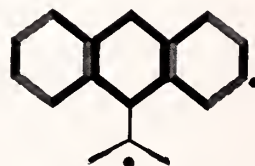
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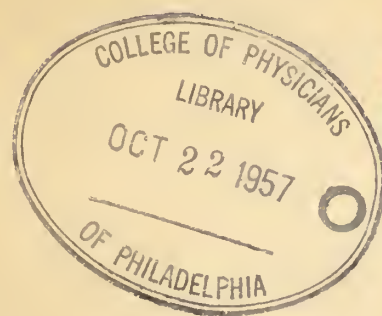
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COMPONENT in each 30 cc. (1 fl. oz.)	ACTION	BENEFIT
Neomycin base, 210.0 mg. (as neomycin sulfate, 300 mg.)	antibiotic	Affords effective intestinal bacteriostasis.
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Dihydroxyaluminum aminoacetate (0.25 Gm.)	antacid, demulcent	Enhances demulcent and detoxifying action of the kaolin-pectin suspension.
Natural belladonna alkaloids: hyoscyamine sulfate (0.1037 mg.) atropine sulfate (0.0194 mg.) hyoscyne hydrobromide (0.0065 mg.)	anti- spasmodic	Relieves intestinal hypermotility and hypertonicity.
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**message
from
the
President**

We Americans throughout the years have enjoyed many exceptional advantages. We have become a great nation because of freedom, and because our forefathers instilled into us the responsibility implied in the very name American. This spirit of freedom and Americanism must be in our heart and soul, in our mind and purpose.

We Americans have always had our problems, but in the past decades grave philosophies have been insidiously injected into the too complacent minds of the American people. These new ideas and "deals" are merely subtle subterfuges to exchange the American way of life for Socialism.

We Americans have watched the rise of internationalism to such an extent that the very foundations of nationalism have been cracked. We have allowed ourselves to be drawn into positions, which may cause us to lose the freedom inherent in the birthright of every human being.

We Americans have been apathetic to the action of our political leaders. We have allowed them and ourselves to be 'pressured' into unsound un-American actions by minority groups. We have watched these minority groups band together to attain an advantage under the false guise of "might makes right." We have seen some of our political leaders 'sell their souls' for votes.

We Americans must wake up! We must fight to regain and retain our inalienable rights, among them are life, liberty and the pursuit of happiness.

America today needs most, more real Americans. We Doctors are Americans too—get out and fight.

E. B. Wersch M.D.

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overgrowth
is a factor

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LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, N. Y.

Flu Fight

Drug Firms Speed
Vaccine Output, But
Will the U.S. Need

Asiatic Virus Raises Threat
Government Buys, Plans
and Hens Have to Handle

8 STUDENTS ON FLIGHTS TO U.S. HAVE ASIAN FLU

New York, Aug. 15 (AP) — Laboratory tests on eight foreign exchange students arrived Aug. 8 show they are victims of Asiatic flu, the health department reports today. The eight arrived on a plane from Europe.

Twenty-nine other students suffering from influenza arrived Tuesday from Rotterdam on the ship Arosa Sky. One, Nicholas Memmos, a Greek exchange student, died yesterday. Six of these students were released today; the others are to be released tomorrow. It has not yet been determined whether they died from Asiatic

flu. The health department is now trying to determine whether the students are the source of the outbreak in the States.

THE INFLUENZA
How Deadly Will it Be?
What Can We Do About It?

IF YOU
Answer
A new
—is showing
around the
now have

U.S. Fighting Asiatic

The War On Asiatic Flu

There's cause for concern about Asiatic flu, but scientists and public health officials see no reason for anyone to panic.

First shipments of the vaccine against the new influenza strain have arrived in Chicago, setting off a flood of telephone calls from worried patients to doctors, and from doctors to drug suppliers. This is a normal pattern of mass fear and is understandable.

Even though Salk vaccine priorities were necessary, the regulation produced administrative headaches, public complaints and probably a gray, if not a black market. When regulation is invoked, it would be

PUBLIC HEALTH

Influenza M

► INFLUENZA, one of the most predictable of communicable diseases, is spreading "on cat feet" across the nation now. It has already struck once this year in mild epidemic form at an Air Force base in Colorado. When and how severe it will strike again is a perennial riddle for public health authorities.

It will probably not lie dormant the rest of the winter months. At the same time, there will be sporadic outbreaks throughout the country. If it

The War on Mutant A

If Florence was in the grip of an epidemic of colds, coughs and fevers, astrologers . . . declared that it was caused by the influence of an unusual conjunction of planets. This sickness to be known as "influenza."
—Chronicles of 1200-1470.

To combat new influenza, a worldwide this week in response from the Far East. So is the World Health Organization, which collects information from around the globe and specimens of the new virus. In more than a century, including those of the

Asian Flu: the Outlook

Asian influenza will hit the U.S. this fall before mass immunization can be effective, and the nation faces an epidemic which may strike 15 million to 30 million people. The disease is relatively mild (in no way comparable to the killing "Spanish flu" of 1918-19), and is likely to cause only a small number of deaths among the feeble young and feebled old. But it may compel 10% to 20% of the population in affected areas to take

thus, a quiet, a complete, Sermon

There's cause for concern about Asiatic flu, but scientists and public health officials see no reason for anyone to panic. First shipments of the vaccine against the new influenza strain have arrived in Chicago, setting off a flood of telephone calls from worried patients to doctors, and from doctors to drug suppliers. This is a normal pattern of mass fear and is understandable. The

to counteract
complications from

DEMIC
Causing It?

“ORIENTAL FLU”

CATCH “ASIATIC” FLU—

the New Virus Threat From Orient

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On Self-Regulated Schedules For Infants

Genetically acquired behavioral predispositions enable the normal baby to regulate its feeding intake and periodic hunger sensations, its feeding habits. These physiological regulatory forces may be satisfied by adapting the formula content and feeding period to the individual needs of the infant. It involves a sensible compromise between too rigid a schedule, geared to the clock and too lax a schedule, based on self-demand feedings. Such is the current objective: for either extreme can lead to infant feeding difficulties.

The newborn may become a feeding problem if the prescribed formula is excessive or the feeding schedule rigid. Every time he is awakened abruptly from satisfying slumber to be fed forcefully, the baby gradually loses his enthusiasm for the food and begins to resist the feeding. The young infant may balk at the crude introduction of a new food or feeding procedure without the proper prelude of gradual adaptation of taste, color, consistency and quantity.

The older infant weaned from bottle to cup may reject milk or go on a hunger strike. Devoted to his bottle he resents its sudden deprivation. It takes a certain readiness for weaning to make that change agreeable. Later the infant becomes somewhat independent of his mother and arbitrary with his food. What he enjoyed yesterday, he rejects today. If he distorts the diet for a day and his mother resorts to force, a feeding problem is in the making. Sensible decorum will solve these

little difficulties before they become big behavior disturbances in childhood.

The problems of infant feeding are always the same but solutions may differ with each era. The carbohydrate requirement for all infants is as completely fulfilled by KARO® Syrup today as a generation ago. Whatever the type of milk adapted to the individual infant, KARO may be added confidently because it is a balanced mixture of low sugars, easily mixed, well tolerated, palatable, hypo-allergenic, resistant to fermentation, easily digestible, readily absorbed, non-laxative. Readily available in all food stores.

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nasopharyngitis
tracheobronchitis
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staphylococci, or mixed flora
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pneumonia not responsive
to other therapy
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viral URI

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References: 1. Case reports in the Pfizer Medical Department Files from fifty-three clinicians, and the following published reports: Shubin, H.: *Antibiotic Med. & Clin. Therapy* 4:174 (March) 1957. Carter, C. H., and Maley, M. C.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 51. Winton, S. S., and Chesrow, E.: *Ibid.*, p. 55. LaCaille, R. A., and Prigot, A.: *Ibid.*, p. 19.

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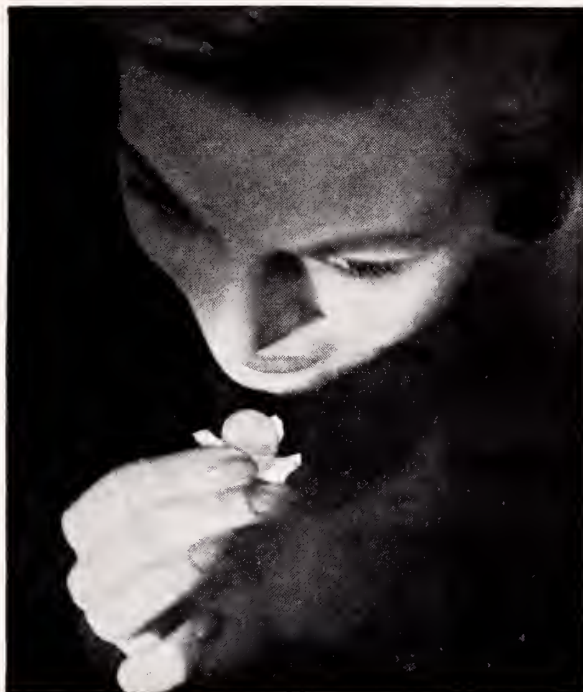
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IN THE BOOKS



THE SPECIALTIES IN GENERAL PRACTICE: by Russell L. Cecil, M. D., and Howard F. Conn, M. D.; published by W. B. Saunders Company, Philadelphia and London, Second Edition, June 12, 1957. 780 pages. Price, \$16.

A must for every general practitioner is the only way one can adequately describe this book. This new second edition, edited by Doctors Russell L. Cecil and Howard F. Conn, has brought up to date this essential volume that was first published in 1951.

Unique in its field, "The Specialties in General Practice" deals in simple terms and practical applications to the problems of the family physician. It is truly a working guide for the busy physician. Each of the 15 outstanding contributors has obviously spent many hours in preparation and condensation of material to produce a book of this nature, which becomes by its very existence a ready reference and handbook to the entire field of medicine.

One need only leaf through the excellent detailed "Contents" or the alphabetical index to realize the painstaking efforts that have gone into producing this publication.

New material added for this edition includes up-to-date medicines and methods concerning the gamut from antimicrobial therapy to the present status of the use of tranquilizers in psychiatric disorders.

With no difficulty, one has at one's finger tips detailed diagnosis and treatment in such fields of practice as: Obstetrics, Gynecology, Pediatrics, Orthopedics, Psychiatry, Ophthalmology, Otolaryngology, Proctology, Urology, in addition to Normal Anatomy and Physiology, Etiology and Differential Diagnosis.

This book should be required reading for all medical students and a constant handy reference for the busy practitioner of medicine. It is safe to say that if one once becomes acquainted with this book, one will leave a standing order for each new edition, for it is rapidly becoming to the field of general practice what Gray's Anatomy is to the medical student.

Carroll L. Witten, M.D.

Gifford's Textbook of OPHTHALMOLOGY: by Francis Heed Adler, M.D., sixth edition, published by W. B. Saunders Co., Philadelphia and London, 499 pages, price, \$8.

This forthright and stout guidebook to everyday ophthalmology has matured through three editions by its original author and now three more in the very capable hands of the Professor of Ophthalmology at the University of Pennsylvania. It is an eminently satisfactory reference for the medical student, the intern, and the general physician who is properly expected to do a considerable amount of his own first echelon ophthalmology. The pediatrician and internist will also find here many sections of value.

There are no footnotes or citations of literature—even from the author's extensive bibliography. Illus-

trations are generously used and subheadings are boldly marked on the uncrowded pages.

Emphasis is placed on the usual and common problems with brief consideration of principles in the rare diseases and procedures. Clear details are given for the removal of foreign bodies, the excision of chalazia and such minor office procedures as any intelligent physician should handle. There is a thorough orientation into the common problem of squint along lines of basic medical thought familiar to any anatomist, neurologist or physiologist. Esoteric details and highly specialized equipment have been completely excluded.

A compact and accurate review of ocular manifestations in general disease is presented in 28 pages, and another 30 similarly capsule the very frequent ocular disorders associated with central nervous system disease.

Specific care for minor injuries and basic management for major injuries are presented in one handy section for quick reference.

It is rare that an author of such distinguished attainments, one who has fostered the major English language textbook of ocular physiology through three volumes, can write so freely and understandingly in a volume of this nature. This book is unhesitatingly recommended.

ARTHUR H. KEENEY, M.D.

A TEXTBOOK OF HISTOLOGY: by Alexander A. Maximow, M.D., and William Bloom, University of Chicago, Seventh Edition, Published by W. B. Saunders Co., Philadelphia and London, April 25, 1957, Price, \$11.

This new edition appears five years after the sixth. To classify this as a "textbook" for the uninitiated, would be a misnomer. It is a storehouse of information, largely contributed by specialists, and would hardly serve as a manual to give the beginner a basic foundation in histology. The book is not easy reading, much of the information being in fine print in the text, or beneath the numerous illustrations, which have been greatly added to in recent editions. Whereas, the much prized first edition, 1930, had 604 illustrations in 833 pages, the seventh edition has 1082 illustrations in 628 pages. Thus, the volume is becoming more and more an atlas. If a picture is worth a thousand words, this adequately compensates for the fewer pages of text.

Fortunately, most of the wonderful illustrations made by the late Alexander A. Maximow, are still incorporated in the present edition. The seventeen photo micrographs in color, taken from von Herrath and Abramow's Atlas, here and in the sixth edition are beautiful, and add color but little additional information to this already well illustrated volume. In one of these illustrations, Figure 8-11, 500x, the

(Continued on Page 919)

in acne



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1. Hodges, F. T.: GP, 14:86, Nov., 1956.

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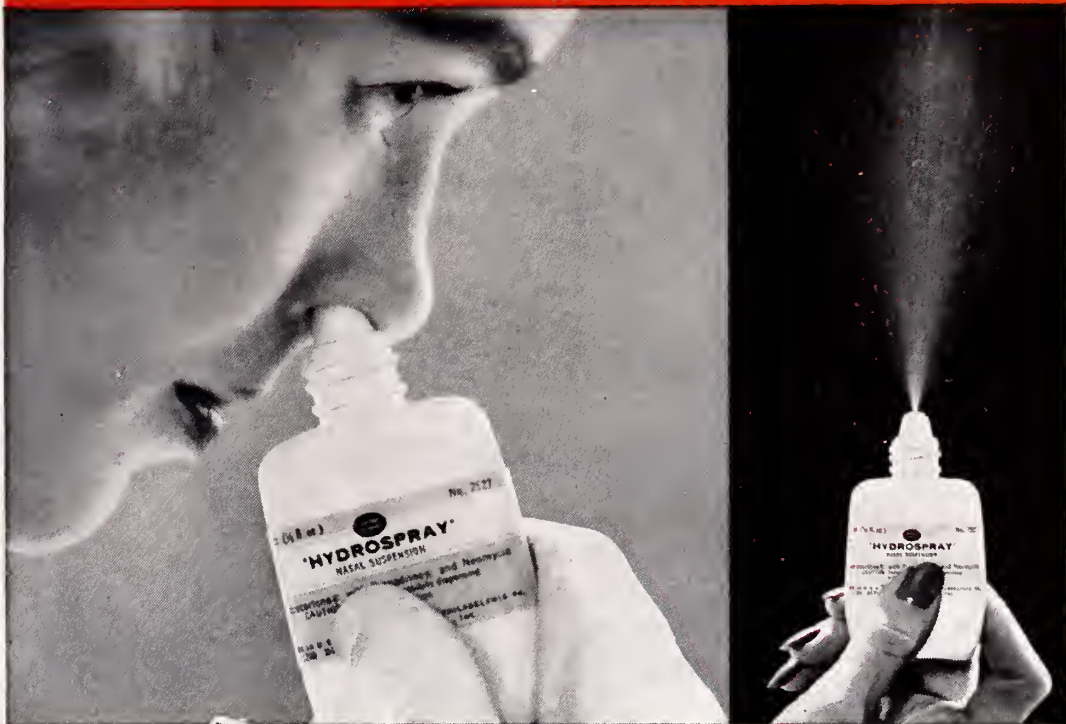
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MAJOR ADVANTAGES: New synergistic anti-inflammatory, decongestant and antibacterial formula. High steroid content assures effective response.



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REFERENCE: 1. Silcox, L. E., *A.M.A. Arch. Otolaryng.* 60:431, Oct. 1954.



WASHINGTON NEWS DIGEST



Washington, D. C.—In the last few years interest has built up in the problems of the older people—how they are to get their bills paid, how to spend their time constructively, what chronic medical conditions are causing them the most trouble. Innumerable national and local conferences have searched for ways to make life more satisfying and healthy for people entering old age, and committees are at work on the problem in thousands of communities.

In this favorable climate, when every device that might help the older citizens is being examined, there is being revived a scheme that met with no success at all when first proposed more than six years ago.

It is a plan for government-paid hospitalization under the Old Age and Survivors' Insurance system.

Here is the argument that is made for it:

People in old age generally have less income than when they were younger, but at the same time they require more medical attention and hospital care. Neither voluntary nor commercial health insurance has been able to offer these people the protection they need. The only solution, sponsors of the plan say, is to get the federal government into the picture.

Opponents of the idea agree that older people are sick more often and generally don't have much money, but they disagree violently with the other arguments. They point out that slowly but surely insurance coverage is being extended to older people at a price they can afford to pay. Most important, hospitalization-at-65 critics maintain that a system like this is in effect national compulsory health insurance under Social Security.

Early this year Reps. Emanuel Celler (D., N. Y.) and John Dingell (D., Mich.) introduced bills on this subject. They would allow 60 days a year free hospitalization for OASI-covered men 65 and over and women 62 and over. Rep. Kenneth A. Roberts (D., Ala.) offered a similar bill.

Just before the session ended two developments occurred that are evidence the proponents of this system of hospitalization are getting ready to make a real fight for it next year.

First, Rep. Aime J. Forand (D., R. I.) presented a bill that would make extensive liberalizations in the social security program, including creation of a hospitalization that would give free surgical service to the aged program. Some national labor leaders immediately pledged their support to this bill, a not unexpected move as the AFL-CIO is officially behind the general idea.

Then Senator Richard L. Neuberger (D., Oregon) made it plain he, too, wanted the old people to have free in-hospital medical care. The senator said he hadn't firmed up his thoughts, but that he believed the best approach would be something like the Mil-

tary Dependent Medical Care program (Medicare), making use of Blue Cross or other nonprofit groups. He estimates that a 1% increase in payroll taxes for both employer and employee would meet the extra costs.

Mr. Forand, on the other hand, is specific. He would make all persons receiving OASI retirement benefits eligible and also surviving widows and children, but would not include persons receiving OASI disability payments. He would broaden the time period by allowing 120 days of hospital or nursing home care each year, with hospital stays limited to 60 days.

The Forand measure also has a provision, not contained in most earlier bills, for OASI also to pay for in-hospital surgical services certified as necessary by the physician.

Mr. Forand would take no chance of running out of money. He would levy social security payroll taxes on all income up to \$6,000 (present limit \$4,200), and also increase the tax rate a half per cent for employer and employee alike, and three-quarters of one per cent for the self-employed.

It is almost certain that these and other similar suggestions will receive serious consideration by Congress next year, with passage of a bill much more likely than in 1951 when President Truman and Oscar Ewing first proposed the idea.

NOTES:

When Congress returns January 7, one of the measures waiting its attention will be a bill to control union welfare funds through registration and publicity. (Most funds involve medical-hospital benefits.)

* * *

Jenkins-Keogh legislation, for deferment of income taxes on money put into retirement plans by the self-employed, now is assured of a hearing next year when the House Ways and Means Committee goes into all phases of taxation.

* * *

The Atomic Energy Commission has made its 100,000th shipment of radioisotopes, many of them for medical use.

* * *

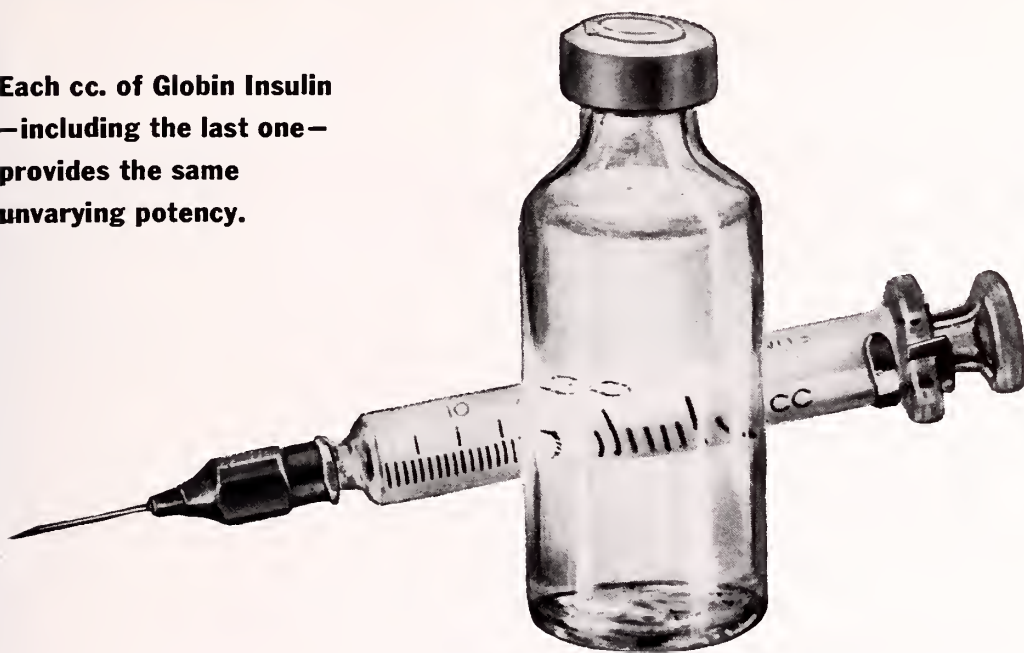
The National Heart Institute, Bethesda 14, Md., has a new booklet, written in popular language, on cerebral vascular diseases.

* * *

American Medical Association is cooperating with American Hospital Association in an effort to persuade the Federal Communications Commission to set aside radio channels for exclusive use of doctors and hospitals.

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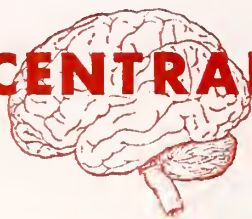
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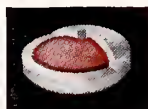
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PUBLIC HEALTH PAGE



THE ASIAN INFLUENZA SITUATION

RUSSELL E. TEAGUE, M.D.

COMMISSIONER OF HEALTH

Commonwealth of Kentucky

A probable fall or winter epidemic of Asian influenza continues to threaten the United States. As part of its preparations for dealing with this probable epidemic, the United States Public Health Service called a special meeting of all State and Territorial Health Officials in Washington on August 27 to review the Asian influenza problem first hand and to help lay plans for combating any epidemic. Representatives of the American Medical Association, the American Hospital Association and a large number of other medical-health groups were also represented.

Doctor LeRoy Burney, Surgeon General of the United States Public Health Service, called this meeting to discuss plans for use of the vaccine now being specifically produced to combat the Asian strain of influenza A.

A general agreement was reached at the meeting relative to allocating the vaccine. Each state will receive its share of vaccine as it is released. An equal allocation will be delivered to each state as a result of a voluntary agreement reached by the various manufacturers. Kentucky physicians are allocated 1.8 per cent from each lot of vaccine produced. Thus far 5,430,000 doses of vaccine have been released.

Distribution of vaccine within a state will be based on local demand, as determined by requests through regular drug distributors. The establishment of priorities in administering the vaccine was left to the local medical societies.

A Committee on Vaccination Promotion resolved at these meetings that the Surgeon General recommend to civilian physicians that they give priority to (1) those individuals whose services are necessary to maintain the health of the community, (2) those individuals necessary to maintain other community basic services, and (3) persons with tuberculosis and others who in the opinion of the physician

constitute a special medical risk. It was also recommended that the Committee on Influenza of the American Medical Association take such action as necessary to assist in implementation of the above priority recommendations.

Doctor M. R. Hilleman of the Department of Respiratory Diseases of the Walter Reed Army Institute of Research highlighted the meetings when he reviewed his findings on antibody production during vaccination with Asian influenza vaccine. His studies revealed a fairly high antibody level could be reached with one or two vaccine doses. These antibody levels were almost as high as those reached by individuals convalescing from the disease. His studies also showed that the vaccine was safe to administer in that no untoward reactions were obtained during vaccination of large number of persons. The fact that the vaccine is relatively safe is also seen from the fact that although several million doses have been given thus far throughout the United States there have been few severe reactions.

At the Washington meeting plans were also formulated for maximum community surveillance within a state of all upper respiratory infections resembling influenza. This was considered necessary in order to determine when an epidemic might become imminent. Surveillance of bacterial infections in all influenza cases was also recommended since these infections would lead to serious respiratory complications following influenzal virus attacks.

It was also recommended that a National Committee on Influenza be established to handle urgent problems relative to current epidemics, to study the behavior of the Asian strain and other new strains which might emerge as variations of the Asian strain in the near future. The Committee also recommended

(Continued on Page 920)

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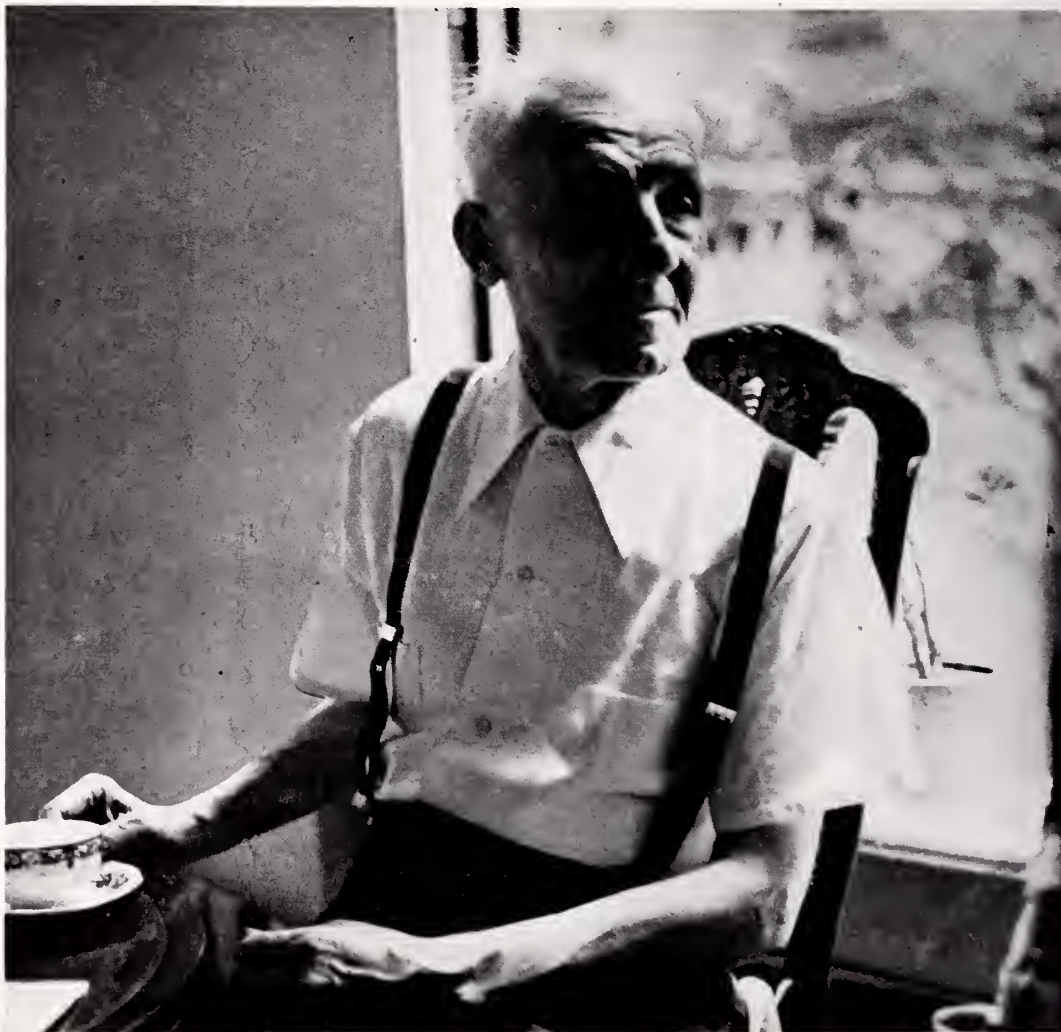
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References: (1) Holt, J. O. S., Jr.: *Dallas M. J.* 42:497, 1956. (2) Gelvin, E. P.; McGavack, T. H., and Kenigsberg, S.: *Am. J. Digest. Dis.* 1:155, 1956. (3) Natenshon, A. L.: *Am. Pract. & Digest Treat.* 7:1456, 1956.

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ANESTHESIA AND OPERATION FOR THE PATIENT WITH HEART DISEASE*

JAMES E. ECKENHOFF, M.D.**
Philadelphia, Pennsylvania

THE practice of surgery has changed greatly in the past 15 years. Patients are being operated upon today who previously would have been denied the benefits of surgery. One can cite the advances offered by hypothermia, heart-lung pumps, and grafting of major blood vessels. Today, we have no hesitancy in operating for 3 hours upon a newborn infant, nor does one worry greatly if confronted with a 90-year-old for subtotal gastrectomy. It has become routine to operate upon patients with far advanced cardiovascular disease, the same ones that we previously refused to consider. We do colectomies in the face of acute fulminating ulcerative colitis. We even take the moribund patient and do a colostomy to decompress his bowel, resect his dissecting aneurysm, or extract an embolus from his aortic bifurcation—and get away with it. However, to anesthetize and operate upon a normal, healthy individual is one thing, but to do the same thing in an acutely ill patient with long standing cardiovascular disease is quite another.

Operations upon people with complicating diseases will increase in number because the average age of the surgical patient is ever creeping upward. One study has shown that the proportion of patients 70 or more years of age operated upon in 1941 was 6.0%, while in 1954, it was 13%.¹ In the same period, the incidence of patients above the age of 50 rose from 30% to 48%. This trend will increase, and with its increase may come a greater anesthetic and surgical morbidity and mortality. A

cry will probably be raised, as it already has, that "the anesthetists are killing our patients," or, "the surgeons are too busy cutting to pay attention to the patient." This is unfair. Morbidity and mortality are directly related to the condition of the patient to be operated upon. The worse his condition the better the care needed. The combined efforts of a team of physicians rather than those of single individuals offer the best chances for success. It is the team effort with which we are principally concerned.

The Risk of Anesthesia and Operation

First, what do we mean by the term "risk"? This implies an estimate of prognosis either from the standpoint of mortality or of morbidity. Actually, the term as ordinarily used is unsound and should be abandoned. To evaluate a "risk" completely would necessitate foreknowledge of such variables as the reliability of suture material to be used, adequacy of sterilization of instruments, availability of drugs, the responsibility of those in charge of postoperative nursing care, and a host of aspects which cannot be assessed for each individual. A patient anesthetized by a medical student and operated upon by a junior surgeon has less chance than would the same patient in the hands of an experienced anesthetist and surgeon. Under these circumstances, the patient's condition has not changed, but the likelihood of survival has increased. One could mention many unrelated factors upon which the success or failure of the operation depends.

A better surgical appraisal can be afforded by designation of the patient's condition as "physical status." Thus a normal patient has a physical status of one. Increasing severity of systemic disease which may or may not be re-

*Read before the Annual Meeting of the Fayette County Medical Society, Lexington, Kentucky, May 14, 1957.

**From the Department of Anesthesiology, Hospital of the University of Pennsylvania, and the Harrison Department of Surgical Research, University of Pennsylvania School of Medicine.

lated to the patient's surgical complaints, indicates a progressively worsening physical status until Class V is reached in which the patient is moribund and not expected to survive 24 hours with or without operation. Theoretically, anesthetic and operative morbidity and mortality should be lowest in classes 1 and 2, and highest in classes 4 and 5.

In institutions where such a preoperative classification has been adopted, investigations have demonstrated the relationship of mortality or of cardiac arrest to be directly related to the physical status. A survey of 190,000 operations at the Massachusetts General Hospital¹ has shown that cardiac arrest in patients of Class I and II is about 1 in 3,300, whereas that in Class III through V is 1 in 200. The implication is apparent. Be forewarned of the possibilities of greater trouble in the patient with poor physical status. If you are concerned over the anesthetic or operative mortality in your institution, you can readily ascertain a real or fancied change in the statistics by a survey of surgical records with assignment of physical status to each patient.

Preoperative Preparation

Determining the physical status of patients with cardiovascular disease depends in great measure upon the information and advice of referring physicians. It would be profitable to enumerate facts a surgeon or anesthesiologist would like to have from internists or referring physicians before the operation is scheduled. Frequently, in hospital practice we ask an internist for advice concerning his patient with heart disease. Invariably, the advice comes back, "Don't let the blood pressure fall, don't let the patient become anoxic, and don't overload the circulation." We know this. It is true for any patient. However, we want information that is not so obvious. In the evaluation of patients with heart disease for surgery, the history is of great importance in helping to assess the physical status. A history of dyspnea or angina and the degree of emotion or exertion necessary to produce angina is of far greater importance than is information obtained from physical examination or indeed from the electrocardiograph. Of equal significance is a history of paroxysmal tachycardia, Stokes-Adams syndrome, pulmonary edema, or congestive failure and the like. Information concerning these factors is vital to provide the best patient care.

A second important point concerns drugs

being taken by patients. This has reached unheard of proportions. For instance, it has been estimated that many millions of people are taking chlorpromazine in this country. Drugs such as this may have grave implications during anesthesia and operation. Often patients do not know what drugs they are taking. The history of the patient should contain a complete accounting of all drugs the patient is receiving or has had prior to admission to the hospital. Verbal reports to the surgeon are insufficient. He may forget to note it on the chart and others intimately connected with the patient's welfare may be unaware of the facts. The internist or referring physician should either write this information on the chart or send a letter to the surgeon or hospital to be affixed to the patient's record.

What are these drugs about which we are so concerned? Among the most important are ACTH and cortisone. Failure to continue these drugs prior to surgery can lead to serious hypotension during and following anesthesia and operation. The phenothiazine derivatives, chlorpromazine (Thorazine®) (Figure 1) and promethazine (Phenergan®) may likewise lead to sudden circulatory collapse under anesthesia.

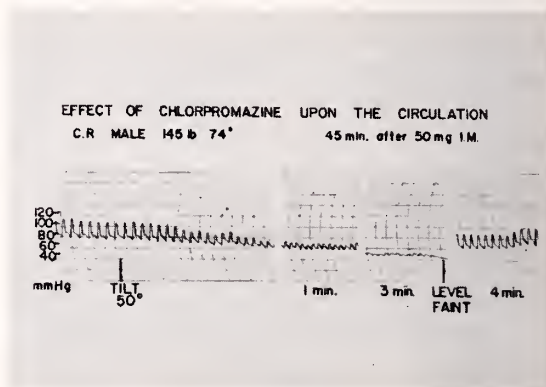


Figure 1

Response of blood pressure, measured intra-arterially, in a subject tilted to 60 degree head-up position, one hour after 50 mg. chlorpromazine was injected intramuscularly.

The antihypertensive drugs such as the rauwolfia group predispose to circulatory instability in the anesthetized patient.² Even the tranquilizers may share in lowering blood pressure during and following operation. Apparently physicians are more alert to the problems associated with digitalis preparations and quinine, but even here specific and complete data are often lacking. Actually, these latter preparations may be of less concern than the former. Information about the sedative habits of patients is worthwhile. Patients who frequently

use barbiturates may be resistant to them in commonly employed doses. Finally, a history of sensitivity to any drug is a helpful guide to those managing the patient's course in the hospital.

What Preoperative Signs in Patients With Heart Disease Suggest Impending Trouble?

All patients with symptoms referable to the heart should have a thorough cardiovascular examination prior to operation.³ This is important not only to detect cardiovascular disease but also to establish a base line for comparison if cardiovascular complications arise. Patients commonly appear in the physician's office with no unusual divergence from normal routine in sight, yet requesting routine physical examination. A surgical operation with its attendant anesthesia comprises a significant stress, possibly one of the most severe stress situations a person of forty years of age or older may be called upon to face. Is it not reasonable that such stress should be preceded by careful examination of the body system most influenced by stress—namely, the cardiovascular system?

Many referring physicians do extensive examination in their offices of patients' cardiovascular systems. Yet this information usually does not appear on the patient's hospital record. A summary of the tests and findings should be sent with the patient. Recently, we witnessed a patient suddenly expire at the conclusion of a cholecystectomy. She was a 55-year-old, moderately obese lady apparently in good health except for mild hypertension. All concerned were surprised and distressed. However, the referring physician appeared in the operating room and informed us he was not at all surprised. He had treated the lady for hypertensive cardiovascular disease and angina for many years. This information was not on the chart, nor was it obtained when her history was taken by surgeon or anesthetist, nor recorded by the resident, interne, or medical student who saw the patient.

ANGINA PECTORIS WITH OR WITHOUT MYOCARDIAL INFARCTION: Probably the leading cause of unexpected catastrophe in the operating room or in the immediate postoperative period is coronary-artery disease. Patients with this disease may suffer myocardial infarction or sudden death at any time and under any circumstance. They may die suddenly before, during or after anesthesia

and surgery no matter how skillfully the anesthetic was administered nor how minor the operation performed. We have had these patients die during the night preceding the scheduled operation, the morning of operation while awaiting anesthesia, during operation, immediately after operation and during the first and second postoperative days when convalescence appeared to be progressing satisfactorily. Interestingly enough several patients with angina pectoris and myocardial infarction and about whom there has been great concern have withstood anesthesia and major surgery exceedingly well only to succumb weeks later at home while sitting quietly in a chair.

CARDIAC ARRHYTHMIAS: Certain arrhythmias appear more significant than others to the surgeon and anesthetist. One of the most important is that of complete heart block. It is well known that patients with this syndrome are subject to sudden cardiac arrest. That the same complication may occur during anesthesia and operation has been borne out by study at the Peter Bent Brigham Hospital.⁴

Unexplained tachycardia is likewise cause for concern. Any patient appearing in the operating room with unexplained tachycardia should have his operation postponed until the cause of the tachycardia has been ascertained. In our experience apprehension is not the most common cause of rapid heart rate under these circumstances. Tachycardia has often been found to be due to previously unsuspected organic heart disease or low blood volume.

HEART FAILURE: Patients with obvious cardiac failure seldom arrive in the operating room without warning. However, it is possible for previously undetected cardiac failure to develop in patients scheduled for operation. Under these circumstances, the operation should be delayed until the situation is brought under control. Rapid digitalization before anesthesia is not recommended. The urgency is never so great that a few hours cannot be taken to accomplish digitalization.

Preanesthetic Medication

Preanesthetic medication can be ordered rationally only after the anesthetist has visited the patient and after due consideration for the patient, the surgeon's requirements, and the anesthetist's own preferences.⁵ The selection of preanesthetic drugs must be the prerogative of the anesthetist since the administration of the anesthetic actually begins when the preparatory

drugs are given in the patient's room. The proper choice of medication can pave the way to a smooth anesthetic, whereas an improper choice can be the cause of an unsatisfactory anesthetic experience for all concerned.

The type and quantity of preanesthetic drugs ordered depend upon the anesthetist's goal. We believe that the patient should be an awake, alert individual. It is safer this way. Yet we make an effort to reduce apprehension. Confidence in one's physician helps to achieve this desired state. If confidence has been inspired, apprehension will usually be minimal and the need for preanesthetic sedatives reduced. If, however, the operation poses an actual or imagined threat to the patient's well-being, confidence alone cannot be expected to allay apprehension. Sedatives then must be used. If pain is a prominent feature, analgesics are indicated.

There is no place for routine medication. There is no more reason for every patient for operation to have a dose of morphine or Demerol® than there is for every surgical patient to have penicillin. For the past 4 years, we at the Hospital of the University of Pennsylvania have deleted narcotics from preanesthetic medication, and believe patients have benefited thereby. We have data to prove that by substituting intramuscular secobarbital for morphine or meperidine (Demerol®), we have seen less apprehension, less respiratory depression, hypotension and tachycardia, and have patients awake from general anesthesia sooner.⁶ We believe improved patient care lies in this direction. There are many who disagree with this opinion, but few have data to support their disagreement.

Much has been written concerning the use of the phenothiazine derivatives, chlorpromazine and phenergan, along with preanesthetic medication. We believe that the hazards introduced by the use of these drugs outweigh any possible advantage gained from them.⁷ This would be particularly true in the patient with cardiovascular disease.

To complete the preoperative preparation, the anesthetist must be familiar with the operation to be performed, the position the patient will have upon the operating table, the amount of relaxation that will be required, and the probable duration of the operation. He must know whether or not intravenous fluids or blood will be needed. It is not asking too much

that he take cognizance of the surgeon's temperament.

The Choice of Anesthetic

Referring physicians and surgeons should not promise patients pentothal, gas, or spinal anesthesia unless the surgeon has the responsibility for the anesthetic by virtue of the fact that a technician will administer it. It is as much the province of the anesthetist to select the anesthetic as it is the surgeon's to choose the type of incision, the operative procedure to be performed, or the suture material to be used. By the same token, the anesthetist must not override objections to his choice and insist upon his own prerogatives unless he has sound arguments to support his position.

Unfortunately, we do not know enough about the action of anesthetics to recommend one agent in preference to another for a particular patient or operation. Specificity exists in only a very few instances, such as cyclopropane or thiopental being contraindicated in patients with severe bronchial asthma. In light of our present knowledge, it is far worse to insist that spinal anesthesia must be given a certain patient rather than nitrous oxide-ether. The anesthetist may not be familiar with the management of spinal anesthesia, but he may be an expert in the administration of nitrous oxide-ether. When he is forced to do something he cannot do well, the patient suffers.

Often an anesthetist would have you believe that his anesthetic does nothing other than produce unconsciousness. Unfortunately, this is far from the truth. A normal, healthy man tolerates general anesthetics well because he has a wide margin of tolerance. However, that margin narrows as the physical condition of the patient worsens. There are patients with far advanced cardiovascular disease who are intolerant of any anesthetic, no matter how expertly given. This means the proper agents for these patients are not yet available, or the knowledge of how to administer the ones we now have is lacking. Even nitrous oxide, normally a mild and innocuous agent, can at times be too depressant. This fact was proven in Korea. We have recently accumulated data indicating that 50 per cent nitrous oxide in combination with oxygen can add greatly to depression produced by barbiturates and opiates.⁸ This, we believe to be an advance in our understanding of the action of combinations of agents.

For the patient in poor condition, the less the anesthetic concentration the more likely the

patient is to survive. Skill in anesthesia is not measured so much in healthy patients as in sick patients. By the same token, the hazards of anesthetic agents are clarified in the patient with poor physical status and not the healthy patient.

The Anesthetic

In the present day practice of anesthesia and surgery, time and scheduling of operation is of considerable importance. Nevertheless, patient safety should never be sacrificed by hurry or attempt to keep the schedule on time. The anesthetist who indulges in the rapid or so-called "blitz" technics of inducing anesthesia courts danger. Normal, healthy persons can tolerate these methods, but the aged or acutely ill may not. Likewise, the surgeon who hurries the anesthetist asks for trouble for his patient. The anesthetist who dawdles in getting ready deserves to be prodded, but once he gets started, prodding may be imprudent. High concentrations of anesthetics, rapidly developed can lead to hypotension and circulatory collapse; whereas the slow attainment of anesthesia in the same patient may be well tolerated. This is especially true in patients with cardiovascular disease.

What about the use of multiple anesthetic agents? Controversy exists as to whether or not multiple agents lead to a higher incidence of morbidity or mortality. So far, few data are available on either side. Unfortunately, we know too little about the effects of individual anesthetics upon various organ systems of the body. We know even less about the interaction of two agents and practically nothing about the combined effects of many agents. It is reasonable to believe that if one drug has its own inherent toxic effects, the hazards must be multiplied with the addition of each agent.

We believe in the use of relatively simplified technics of anesthesia. We believe that the gaseous and volatile agents are probably safer than the popular nitrous oxide-pentothal-opiate-relaxant combination, especially for abdominal and thoracic operations. If trouble occurs with the former agents, ventilation of the lungs will reduce the concentration of anesthetic. With the latter, the drugs must be metabolized and their destruction cannot be hurried. Proof that our belief is correct is lacking.

What is the present day place of spinal anesthesia? Numerous stories of complications arising as a result of spinal anesthesia and present

day medico-legal practices have markedly reduced the use of this method. Anesthetists and surgeons are often unwilling to use the method because of the fear of lawsuits. Nonetheless, it offers significant advantages under certain conditions and should not be relegated to the scrap heap. Patients with cardiovascular disease often tolerate this technic better than they do general anesthesia, but the anesthetist must know how to use it and the surgeon must know how to work with it. We do not believe the incidence of complications is any higher than that associated with general anesthesia if a meticulous technic is used. In fact, it appears to be less.⁹

The Operation

There is a common belief that speed is no longer essential in surgery. This is only partially true. The time element may be of little importance in the healthy person, but as the physical status of the patient worsens, speed becomes more important. Ill patients tolerate brief operations better than long ones. This is well exemplified in the patient in poor condition from bowel obstruction. A colostomy performed in a few minutes followed by a colectomy at a later date when the patient's condition has improved may be life-saving. In general, the poorer the patient's condition, the shorter the operation should be, compatible with good surgical practice. All concerned should realize that morbidity and mortality proportionately increase as the duration of operation lengthens.

The surgeon must not expect or demand the same operating conditions in the patient in poor physical condition as he does in the healthy patient. A compromise must be drawn between the anesthetist offering the best conditions compatible with the patient's physical status and the surgeon asking for the least he needs to satisfactorily perform the operation contemplated. Insistence of either on anything else only leads to trouble. It is notable that in the Massachusetts General Hospital study, 34 of 135 cardiac arrests occurred during a period when an attempt was being made to deepen the plane of anesthesia.¹ It is also interesting that 24 of these 34 patients survived after cardiac massage.

Patients with cardiovascular disease are often intolerant of certain positions upon the operating table or of sudden changes in position after anesthetization. If a patient cannot lie supine in bed prior to operation, he probably cannot tolerate a similar position on the

operating table. We have found it worthwhile to test patients' responses to a given position prior to induction of anesthesia. If hypotension develops, a different position is recommended. When an individual cannot lie flat because of dyspnea, anesthesia can be induced with him in Fowler's position. If patients are to be turned after anesthetization, the blood pressure must be carefully checked before and after the change. Sudden turning or movement as in transferral to a litter after anesthesia has resulted in several deaths in our institution.



Figure II
Demonstration of a patient with severe orthopnea being anesthetized in the semi-Fowler's position.

Vasopressor Drugs

For a variety of reasons, hypotension is a common occurrence following operation. The patient with cardiovascular disease cannot tolerate protracted hypotension. In so far as possible, his blood pressure should be maintained in the range usual for him.

In selecting a vasopressor drug, one must first ascertain certain facts. If the heart rate is slow, a drug with a myocardial stimulant action as well as a peripheral vascular constrictor effect should be chosen. Ephedrine or Methedrine® are suitable here. If the heart rate is normal or rapid, a drug with minimal cardiac action and with maximal peripheral constrictor effect is preferable. Neosynephrine® or Vasoxyl® are the drugs of choice here. If a single intravenous dose of a pressor drug is not sufficient to support the blood pressure, we have resorted to a continuous infusion of five

per cent glucose containing 10 or 20 mg. Neosynephrine® per 500 cc.

Norepinephrine should only be used if other vasopressor drugs have failed, or if maximal constrictor effect is needed. It is the most potent pressor drug available, but it is also most evanescent in action and may lead to tissue sloughs, particularly if given through the veins of the legs.

The Postoperative Period

As an operation draws to a close, there is a natural tendency for all concerned to "let down." The pressures associated with the surgical procedure are over, and with the understandable desire to relax, attention may be diverted from the patient. The surgeons usually leave the room. Often the anesthetist is left alone with the patient, and he may be busily engaged in cleaning his equipment. Yet at this time, a number of events may transpire which pose a threat to the patient's welfare.⁵ Vomiting may occur. If a high concentration of oxygen has been used during anesthesia, its replacement with room air can have untoward consequences. Emergence excitement may develop. Pain may begin to be experienced by the patient and fear and anxiety become manifest. The patient's position is changed as he is moved from operating table to bed or litter. Atelectasis, pneumothorax, or the sequelae of inadequate treatment of blood loss may escape detection. The period is a crucial one. It demands the careful and undivided attention of the anesthetist and the help of one of the surgical assistants. Despite the urge to let down, one must not succumb to that urge until the patient has been removed to the recovery room and is under the watchful eye of a competent nursing staff.

Patients with cardiac disease often are more comfortable if their head is raised immediately postoperatively. The blood pressure must be frequently checked at 5 to 10 minute intervals until after the patient has returned to his room and conditions have stabilized. Transportation must be with care. The administration of most drugs must be followed by a careful check of vital signs, particularly after narcotics or nitroglycerine. The latter drug may produce marked hypotension if spinal anesthesia is still effective. In the elderly, the legs may be wrapped with elastic bandages to prevent peripheral pooling of blood and consequent hypotension.

There is a general tendency to administer too

large doses of narcotics immediately post-operatively. The result is hypotension or re-anesthetization. Either can have serious consequences. We have found it wise to give morphine intramuscularly in 5 mg. doses or meperidine 25 mg. for pain relief. This will provide pain relief in about 50 per cent of patients. The dose can be repeated in 30 minutes if necessary. By such fractionalization, hypotension and respiratory depression can be avoided. Morphine is superior to meperidine for analgesia.

Referring physicians and internists should make it their business to visit their patients postoperatively, not to pay their respects, but to assist in the patient's management. Most surgeons are anxious for suggestions concerning the care of patients with cardiovascular disease. There may be need for an alteration of digitalis dosage; fluid may be accumulating in the chest; an irregularity in pulse may mean something more to the internist than to the surgeon. Likewise, the anesthetist must participate in postoperative care if he expects to be considered more than a technician. He can advise as to inhalational therapy, removal of secretions, and prevention of atelectasis, and the use of narcotics and sedatives.

Summary

It should be obvious from the foregoing that today the best care of surgical patients is pro-

vided by teamwork. None of us doubt that a championship football team attains its proficiency as a result of perfect team play, not as a result of the play of individual stars. The same theory applies to the team of physicians involved in the treatment of the surgical patient. If each physician treats every patient as if he were a member of a championship team, the ultimate in medical care will result. But unfortunately, in the rush of modern practice, we often forget this dictum. Forgetting will not make too much difference to the patient in good health. However, it may spell the difference to the surgical patient with a complicating cardiovascular disease.

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PROTEIN METABOLISM IN DIABETES MELLITUS AND VASCULAR DISEASE*

LEWIS DICKINSON, M.D.

Glasgow, Kentucky

SINCE Thomas Willis (1621-1675) first remarked on the sweetish taste of urine in diabetes and prescribed undernutrition as a successful means of reducing the sweet taste of urine, physicians have been chiefly concerned with reducing the glycosuria and hyperglycemia at the expense of other vital alterations of metabolism.

Varied reading on the subjects of diabetes, metabolism, and vascular disease has caused the author to formulate the hypothesis that vascular disease in diabetes mellitus is a result of intermittent or chronic protein deficiency brought about by excessive glyconeogenesis.

When inadequate insulin is present in the human body, insufficient carbohydrate is metabolized to furnish energy requirements. As a result the energy must be supplied by protein and fat. In the normal or controlled diabetic individual, fat is broken down in the liver to ketone bodies which are completely metabolized in the tissues as such. In the inadequately treated diabetic and in the carbohydrate starved individual, the amount of fat broken down in the liver greatly exceeds the rate of metabolism of ketone bodies in the tissues. As a result ketone bodies accumulate and ketosis is present. When insufficient carbohydrate is metabolized glucose is formed from body protein in the liver. Nitrogen released from protein by this glyconeogenesis is lost in the urine along with glucose.¹

Ten years after insulin became commercially available, Rabinowitch² stated that the mortality rate in diabetes was normal except for the deaths due to vascular complications and proposed a treatment to correct these complications. He noted some correlation between the prevailing high fat, low carbohydrate diets, the high plasma cholesterol, negative nitrogen balance, and cardiovascular-renal complications.

The Affects of Diet Changes

Using diets with sufficient calories to maintain body weight slightly below normal, Rabinowitch

utilized carbohydrate as the main source of energy and greatly reduced the fat content. In shifting patients from the prevailing high fat diet to the low fat, high carbohydrate diet, the protein content remained within the normal recommended range. Following the shift in diets he noted little or no change in insulin requirements, a decrease in plasma cholesterol to normal and a general improvement in the well-being of the patients. There was little change in blood glucose levels, but a tendency to lower levels was noted. Nitrogen excretion was reduced so much that he checked his experiments for a source of error.

Jackson and Kenefick³ using children with stabilized diabetes, showed that once a child's insulin requirement was established, the fat-carbohydrate ratios could be changed radically without change in the insulin requirement as long as total calories remained constant. The blood sugar curves were plotted on a chart showing no significant change between high fat or the high carbohydrate diets, and no significant difference from blood sugar levels of normal non-diabetic children.

With present knowledge of protein metabolism, it appears that in the low carbohydrate diets the blood sugar levels were maintained by glyconeogenesis with resultant loss of nitrogen. According to the criteria of blood sugar and urine sugar, these patients were "well controlled." In the patients with high carbohydrate intake, the major source of calories was supplied by carbohydrate while protein was spared and thus retained for normal anabolism. This explains the low nitrogen excretion which surprised Rabinowitch.

It has frequently been noted that some patients with mild "well controlled" diabetes manifest vascular complications while other patients with high insulin requirements, who are "poorly controlled," have no vascular lesions. Could it be that these mild "well controlled" cases are really on restricted carbohydrate intake and protein is broken down to maintain their normal blood sugar level as seen in Rabinowitch's and in Jackson's cases? Could the "poorly controlled" cases be the high carbohydrate intake patients, who, when given enough insulin to

*Written at the request of the Kentucky State Medical Association's Committee on Diabetes in connection with the Kentucky Diabetes Detection Drive, which is sponsored by KSMA as a public service in cooperation with the American Diabetes Association.

utilize adequate carbohydrate, spared protein?

It is well known that unstable diabetics as a group develop vascular complications more readily than the stable group. Izzio⁴ has shown that in unstable diabetics a partial reduction of exogenous insulin produces a prompt hyperglycemia, glycosuria, ketonuria and negative nitrogen balance. A distinct positive correlation of daily blood sugar levels and excretion of nitrogen was noted, indicating an increase in glyconeogenesis. In contrast it was noted in a stable group of diabetics, that withdrawal of exogenous insulin produced a slow rise in blood sugar and slow increase in glycosuria, but no ketonuria or negative nitrogen balance. This suggests that the slow rise in blood sugar with normal nitrogen balance is due to adequate utilization of glucose for energy, the excess glucose causing hyperglycemia and glycosuria.

The Dynamic State of Proteins

Keiding⁵ produced evidence of decrease in serum protein in all groups of diabetics, including those without vascular complication, and quotes Schneider, Lewis and McCollogh in stating that the decrease in total protein concentration is mainly due to a fall in albumin content and that this probably indicates a disordered pattern of protein metabolism as a result of poor control.

Allison⁶ in a recent review, states that tissue proteins are continuously being broken down and resynthesized, thereby creating a dynamic state in which nitrogen may flow from one tissue to another. Protein metabolism in many centers is integrated into the dynamic state of the body as a whole. It is assumed that each center of protein anabolism, at the cellular level, demands a properly balanced mixture of amino acids for anabolism, the amino acids being derived in part from extra cellular sources. The rate of turnover of different proteins varies greatly; some being very labile, some less so, and some so stable that they draw from but contribute little or nothing to the metabolic pool. Such a dynamic state can result in the maintenance of one tissue at the expense of another.

The essential amino acids must be provided every day in the diet in proper amounts and proportions together with an adequate supply of non-essential amino acids, if protein synthesis and other metabolic functions are to take place normally. If the food protein is deficient

in one or more of the essential amino acids, tissue protein synthesis will be restricted and some of the dietary amino acids will enter catabolic pathways leading to the excretion of nitrogen.

The labile proteins which act as protein stores are cytoplasmic proteins and the blood proteins, particularly plasma albumin, rise and fall with increases or decreases in the diet. When the individual is in negative nitrogen balance there is a depletion of labile protein stores, therefore, a decrease in plasma albumin would seem to be an accurate indicator of protein deficiency. When there is an imbalance in protein stores, the greatest imbalance associated with protein depletion is usually observed in the liver. Here many of the labile protein stores are enzymes. The imbalance in the liver results in altered liver function which may result in deposition of fat and increased synthesis of cholesterol.

In normal synthesis of protein it is essential for the peptide bond to have an available reservoir of high energy phosphates. Insulin is apparently necessary to stimulate muscle to use more carbohydrate, which build more adenosine triphosphate (ATP) and hence allows more protein synthesis.⁷

In liver disease and starvation which cause a depletion of high energy phosphates, protein synthesis appears to be diminished. In insulin deficiency, not only is carbohydrate starvation present, but carbohydrate produced by glyconeogenesis is not utilized in production of high energy phosphates. Though the protein intake be high, it is absorbed as amino acids and cannot be resynthesized into protein for normal anabolism. Its fate can only be glyconeogenesis.

Types of Vascular Disease

Vascular diseases in diabetes are divided into two types; those that are distinctive to diabetes, such as micro-aneurysms of the retinal arteries and Kimmelstiel-Wilson type lesions in the kidneys; and those not distinctive to diabetes, such as atherosclerosis and arteriosclerosis which are found in the non-diabetic, but occur much earlier in diabetes.

Those vascular lesions distinctive to the diabetic were found by Bryfogle⁸ to be related chiefly to the duration of diabetes while vascular manifestation such as coronary heart disease and peripheral vascular disease were related both to the age of the patient and duration of the diabetes. One is tempted to draw

some analogy between arteriosclerosis and osteoporosis since both occur in old age and both seem to be aggravated after the menopause. Albright⁹ has shown that osteoporosis is due to a deficiency of bone matrix which is protein in nature. This condition may be found in malnutrition, post-menopausal state, Vitamin C deficiency, Cushing's syndrome and poorly regulated diabetes mellitus. The common denominator of these varied causes is deficiency of a catalyst necessary in forming the matrix protein at the cellular level or basic deficiency of protein itself.

Lansing¹⁰ after extensive study of elastic tissue of arteries, has concluded that atherosclerosis must be considered as two diseases. One disease involves a defect in cholesterol metabolism while the second disease is manifested by a breakdown in the structure of elastic elements in the arteries accompanied by calcification of the elastic material. It was also observed that elastic tissue breaks down prior to the formation of atheromata. Decrease in elastic tissue in aging arteries, a loss of elasticity and a change in composition of protein of elastic tissue was noted with age.

Mann and Stare¹¹ demonstrated that cholesterol feeding alone has little effect on the formation of atherosclerosis in the adolescent cebus monkey. However, if the animals are deprived of sulfur containing amino acids, within eighteen weeks gross atheromata may be observed in the aorta. It was also noted that it was not necessary to produce a severe amino acid deficiency to produce atherosclerosis. A severe deficiency caused anorexia and thus effectively blocked the hypercholesterolemia and atherosclerosis.

Best and associates¹² reported that a high percentage of rats placed on a diet deficient in choline developed heavy lipid deposits in the coronary arteries and aorta while controls remain entirely free of vascular disease.

Balo and Banga¹³ originally prepared elastase and characterized it as an enzyme acting on elastic tissues. Lansing and associates (1953) showed elastase to be a product of the islet cells of the pancreas and that elastase decreased with age and that there appears to be a direct correlation between the increase in arteriosclerosis and decrease in elastase.

Discussion

In the foregoing review no definite proof has been offered that vascular complications in

diabetes are due to chronic or intermittent protein deficiency, however the evidence appears highly circumstantial. It appears significant that elastase and insulin both have their origin in the same islet tissue. Possibly elastase is a catalyst which may be necessary to lay down new protein in vascular elastic tissue. Other enzymes which may be necessary catalysts for protein synthesis in vascular elastic tissue may be among those enzymes effected by imbalance in labile protein stores. Possibly cholesterol may be the remaining component of a lipo-protein complex in the vascular wall, when protein is withdrawn into the metabolic pool. In the presence of hypercholesterolemia, which may be caused by protein deficiency in the liver, cholesterol may be deposited in defects in the vessel wall because the required amino acids are not available in the metabolic pool to replace those lost by normal catabolism.

From a practical standpoint the author wishes to emphasize that undernutrition is no more desirable in diabetes than obesity and that treatment of mild diabetics by restriction in carbohydrates alone may be no better than no treatment at all. The aim in treatment should be to maintain the patient on as nearly normal weight and diet as possible and to insure that adequate exogenous insulin is supplied to maintain a normal nitrogen balance.

Tolstoi¹⁴ has claimed that no definite evidence has been presented to prove that moderate hyperglycemia or glycosuria are harmful. Although many challenge his statement, none have offered proof of harmful effects.

Possibly hyperglycemia and glycosuria are harmful only if they represent glyconeogenesis and are harmless if they represent only excess carbohydrate feeding. If this be true, the physician could feel more secure in allowing hyperglycemia if plasma albumin is maintained at a high level. A satisfactory standard has yet to be established for plasma protein since present knowledge of plasma proteins allows a wide normal range.

Summary

The author has discussed protein metabolism and its alterations in diabetes mellitus. Some experimental reports on vascular disease in general have been reviewed and an attempt has been made to correlate this material to support the hypothesis that vascular complications in diabetes mellitus are a result of chronic or intermittent protein deficiency due to excessive

THE METABOLISM OF IRON*

RICHARD H. MENSE, M.D.**

Hamilton, Ohio

NUMEROUS studies concerning the metabolism of iron have been undertaken, particularly during the past fifty years. However, little advance was made until studies with radioactive iron were used during the past ten years.

It is the purpose of this paper to discuss the present day concepts of the absorption, transport, storage, utilization, and excretion of iron and their application to hemochromatosis and iron deficiency anemia.

Physiological Concepts

Iron is an essential component of the molecular structure of hemoglobin, myoglobin, the cytochromes and other enzyme systems required for the physiological functions of oxygen transport and cellular respiration. The normal human adult body contains 3 to 5 grams of iron.

Iron Compounds of the Body

Iron exists in the body in two states. The first includes the iron porphyrin or heme compounds and the second includes the non-heme iron compounds.¹

**From the Medical Service, Veterans Administration Hospital, Louisville, Ky., and the Department of Medicine, University of Louisville School of Medicine.*

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***Formerly, resident in medicine, V. A. Hospital, Louisville, Ky.*

glyconeogenesis. The protein deficiency may be one of quality rather than quantity. It may be mild and consist only of deficiency of sulfur containing or other essential amino acids. The evidence is highly circumstantial, but not conclusive.

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The iron porphyrin heme compounds include hemoglobin, myoglobin, and the heme enzymes, cytochrome_c, cytochrome_{a₃b}, catalase and peroxidase. This group accounts for 60 to 75% of total body iron. The majority is present in hemoglobin with only minute quantities of iron located in the heme enzymes. These compounds serve to make oxygen available to the cells.

The non-heme iron compounds may be subdivided into two classes. The first group includes the compounds of iron in which the iron atoms are monomolecularly dispersed and includes ferrous iron as a free ion and siderophilin or B₁, serum globin, the transport form of iron. This group accounts for about 0.1% of the body iron.

The second group of the non-heme iron compounds contains iron in the form of ferric hydroxide units. These compounds act as storage forms of iron and include ferritin, non-crystallizable ferritin and hemosiderin.

Total hemoglobin iron including myoglobin accounts for 65 to 75% of total body iron, storage iron, as ferritin about 15% and the other known compounds less than 1%. Thus about 10 to 15% of total iron in the body remains to be accounted for.

Iron Intake

Man absorbs iron largely if not entirely in its ferrous form.² However, most of the iron in food occurs either as ferric hydroxide or as ferric organic chelates. The compounds are broken down in an acid medium into free ferric ions or loose chelates. The gastric HCl is important for this purpose but the organic acids

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of foodstuffs can perform a similar function.³ Grace⁴ has shown that there is no direct relationship between the absorption of iron and gastric acidity. Reducing substances in the food such as ascorbic acid, or SH compounds such as cysteine, change ferric to ferrous irons for absorption by the mucosal cells.

Iron may be absorbed all along the intestinal tract. However, very little is absorbed normally except in the upper portion of the small intestine,^{5,6,1} and absorption probably decreases progressively in the more distal segments of the intestinal tract. The reason for this diminishing gradient is not known. It may be that the ileum is not as efficient as the duodenum in absorbing iron or it may be that insoluble complex iron compounds form by the time distal portions of the small intestine are reached.⁷

Regulation of Absorption

In general, an organism may regulate a substance taken into the body by way of the gastrointestinal mucosa in two ways. All of the substance may be absorbed and the excess excreted or there may be a mechanism for regulating the amount of a particular substance which is to be absorbed. It has been shown that one of the most distinctive features of iron metabolism is the conservation and very limited excretion of iron by the body.⁸ A regulatory mechanism apparently resides in the mucosa of the gastrointestinal tract. The mucosa behaves under normal conditions to maintain a low, relatively slow rate of absorption, but in anemia it responds by absorbing iron with greater efficiency.^{5,9}

The mechanism of mucosal absorption of iron is not completely understood. One theory postulates that iron enters the mucosal cells and combines with a protein, apoferritin, to produce ferritin. It is suggested that apoferritin is constantly being formed and broken down and this ceases when it combines with iron to form ferritin. The presence of ferritin is associated with a block of further absorption until ferritin can give up its iron to the blood stream.^{7,10,5} The increase and decrease in mucosal ferritin seems to correspond in time to the appearance and disappearance of the mucosal block.⁹

If this theory is correct it is still necessary to explain why the iron deficient patient absorbs iron two to ten times more effectively than the normal person.⁵

It has been suggested that the plasma iron

level may be a factor controlling the absorption of iron from the intestinal tract. This has recently been disproved. It is possible to inject, in a few hours, sufficient iron into patients with iron deficiency anemia to correct the deficiency without destroying the ability to absorb iron from the intestinal tract at a more rapid rate than normal.^{7,10}

Another possible explanation is that the low oxygen carrying power in anemia might lower the oxygen available to the mucosa and affect the relative redox level of the cell or act indirectly through a hormonal mechanism. However, iron absorption does not vary in direct proportion to the degree of anemia.^{3,7}

Apparently alterations in iron absorption may occur independently of anemia. It has been demonstrated that deficiency in body copper in rats suppresses iron absorption. The absorption of iron may be markedly increased by use of diets in which corn is the principle source of protein. In these cases, factors other than the phosphorus content of the diet seem to be involved.^{10,13}

Variations in iron absorption are present in many pathological states. Decreased absorption has been noted in patients with idiopathic steatorrhea, pancreatic steatorrhea, and multiple small bowel resections for regional enteritis. Increased absorption was found in pernicious anemia, hypoplastic anemia and hemochromatosis.^{3,11}

The conclusion at the present time is that the process by which iron is absorbed by the intestinal mucosa is not completely understood. The mechanism apparently resides in the intestinal mucosa and is selective enough to be more efficient when the body requires larger amounts of iron.^{7,10}

Most of the information about iron absorption has been obtained from experiments in which iron salts were used because intake from foods has been very difficult to measure. Foods containing radioactive iron are now available. Using radioactive techniques it has been demonstrated that less than 10% of food iron is absorbed by normal persons. Patients with hypochromic anemia seem to assimilate iron from food better than normal. Ascorbic acid and foods that contain ascorbic acid increase the absorption of food iron presumably by the reducing action of the ascorbic acid. And gastric acidity is of even less importance in enhancing iron absorption than was formerly believed.¹²

The average American diet contains 12 to 15 mg. of iron per day. Thus the amount of iron absorbed per day varies from 0.6 to 1.5 mg.¹

Iron Transport

The ferrous iron absorbed from the intestine is auto-oxidized to the ferric state and in the presence of CO₂ to form a complex with a metal binding globulin known as transferrin or siderophilin.¹⁴ Each molecule of this plasma protein can combine with two atoms of iron. Studies indicate that while there is enough of it in plasma to bind about 300 to 420 micrograms of iron per 100 cc. of blood only about one third of this total amount is combined with iron.^{1,3,7} This saturation is increased in conditions of iron excess and decreased in iron deficiency.

Plasma iron is the hub of iron metabolism. It transports iron to the organs of storage, utilization and excretion and is in turn replenished by the organs of storage and conservation and also by the intestinal tract. Thus the level of serum iron is the result of a dynamic equilibrium. The factors influencing it are hemoglobin breakdown, uptake by bone marrow, removal and storage in the tissues, absorption from the intestines and the rate of formation and decomposition of transferrin.^{3,7,9,14}

The level of serum iron and the degree to which transferrin is saturated with iron are thought to be a reliable indication of iron deficiency or iron excess. The total serum iron of normal man is about 4 mg. Transferrin tends to become saturated with iron in conditions in which iron is high in the body, as in hemochromatosis or transfusion hemosiderosis, or when the red cells tend to be fragile or hemolyzed, as in Mediterranean anemia or hemolytic disease. This also occurs in disease states in which the marrow appears to demand iron but cannot use it readily, as in pernicious anemia^{11,15} or pyridoxine deficiency, or in cirrhosis or hepatitis when the liver is damaged and unable to store excess iron. Transferrin tends to be relatively unsaturated when the bone marrow is very active as following acute blood loss, or when iron is low in the body as in iron deficiency anemia. This also occurs in acute or chronic infections and in copper deficiency.⁹

It has been shown that serum iron cannot be increased above the measured saturation point of the globulin. This confirms other evidence that iron cannot exist in the free state in the serum.¹⁴

Utilization

The mechanism of transfer of iron between the tissues and plasma is unknown.⁷ Most of the iron that is assimilated is used for the daily synthesis of hemoglobin. About 27 mg. of iron leaves the blood stream each day. About three fourths of this iron (20 mg.) is taken up by the marrow for daily hemoglobin synthesis and the excess is stored. About 27 mg. of iron enters the blood stream daily and about 20 mg. of this is derived from the catabolism of red blood cells and most of the remainder from storage iron and a very small amount from ingested iron. The iron released from catabolized red cells and that entering the blood stream is rapidly utilized but storage iron is turned over relatively slowly. Thus the principle cycle of iron turn-over is from the serum to newly formed red cells and from catabolized red cells back to the serum.⁹

The iron for hemoglobin synthesis may be studied with radioactive techniques, but as yet, no satisfactory method has been devised for measuring utilization for myoglobin and respiratory enzymes.⁷ Studies that have been undertaken show that the iron has a long life span in these tissues. They seem to hold on to their iron even when a deficiency exists.^{7,9}

Iron Storage

The maintenance of an effective but limited iron reserve is important to the proper regulation of iron metabolism between the two extremes, hemochromatosis and iron deficiency anemia. Storage iron has been defined as the iron that can be mobilized from various body tissues for the formation of hemoglobin when needed.¹⁶ Iron is stored intracellularly as ferritin and hemosiderin.^{3,7,17} The iron from both compounds is readily available to the body when the need for iron exists. Studies have shown that the relative amount of each is a function of the total amount of iron present. In the normal person there is usually slightly more ferritin than hemosiderin. However, when excess tissue iron is present there is progressive increase in the proportion of hemosiderin.^{25,27}

The ability to store iron is shared by many tissues. Two important localities of iron storage are the reticulo-endothelial system and parenchymal storage. Iron is stored in the reticulo-endothelial system in both the fixed phagocytic tissue and the wandering tissue macrophages. Parenchymal storage includes the polygonal

cells of the liver, glandular tissue of the pancreas and adrenals, and other secretory cells of the body.¹⁶ In man the highest concentrations of ferritin occur in the liver, spleen and bone marrow.³

The iron reserve in man as mobilized by repeated phlebotomies has been calculated by various observers to be approximately 900 mg. to 1500 mg.¹⁹ Hahn²⁰ has estimated storage iron to be 20% of total body iron by chemical analyses of iron deficient and normal dogs. Thus in man with approximately 4.5 gm. of body iron, this would represent 900 mg. of storage iron.

All available data indicate that normal iron stores are built up slowly over a long period of time. The iron stores of patients on a normal diet for one year after a series of phlebotomies showed only a negligible accumulation of iron. A series of phlebotomies followed by six months of oral iron therapy showed negligible iron stores.

Thus it seems that iron taken orally is absorbed in increased amounts only until the anemia is corrected and iron stores are not easily replenished by the oral route. Iron stores when depleted are rebuilt slowly.¹⁹

Excretion of Iron

According to all available evidence, the human body has very little ability to rid itself of iron through ordinary excretory channels. Because conservation is so important and the amount of iron excreted is so small many people have assumed that no iron is lost except as blood loss. This concept has been shown to be erroneous. All cells of the body contain some iron. Thus when leucocytes and epithelial cells are discharged in body secretions, when cells are desquamated from skin or mucous membranes and even when hair grows, some iron is lost. However, the amount of iron lost by these routes must be very small.^{6,7,21}

In 1949 it was reported that significant amounts of iron are lost through the skin.²² These investigators induced sweating in three individuals and chemically determined the iron in sweat and calculated that as much as 6.5 mg. of iron per day might be lost even under conditions of minimal sweating. Other investigations have not confirmed these results.^{23,24}

The total amount of iron excreted by a healthy adult male probably varies between 0.5 and 1. mg. daily. Of this amount the urine contains 0.1 to 0.5 mg. per day, feces less than 0.5

mg. per day and sweat, less than 0.5 mg. per day. To this 0.5 to 1. mg. excretion one must add for women the requirements for menstruation or pregnancy. The total daily excretion of iron for a woman during pregnancy or menstruation is approximately 1. to 2. mg.⁷

Iron Excess and Iron Deficiency

Hemochromatosis may be defined as an iron storage disease. It is the result of an inborn error of iron metabolism that results in toxic accumulations of iron in the body tissues with resultant tissue damage. This is to be differentiated from hemosiderosis which may be defined as a focal increase in tissue iron or general increase in iron stores without associated tissue damage.^{25,26}

In hemosiderosis excessive amounts of iron are found in the liver and spleen but rarely in the pancreas, heart and endocrine glands. And the amount of iron stored is much less than in hemochromatosis. Hemosiderosis may result from transfusions, administration of iron intravenously or excessive red blood cell breakdown in hemolytic anemia.²⁶ Thus the distinction between hemochromatosis and hemosiderosis is based on the presence or absence of organ dysfunction.²⁵

The prerequisite for the development of hemochromatosis is the presence of enough iron over a sufficient interval of time to produce hepatic or other tissue damage.²⁵ The classic tetrad of hemochromatosis is skin pigmentation, diabetes, liver disease and heart disease.

Storage iron is the only compartment that is capable of marked expansion. A relative increase in storage iron occurs by transfer of red cell iron into tissues. This may be caused by anemia, except that due to blood loss, or by focal extravasation of blood. An absolute increase in body iron results from increased absorption.²⁵ Measurement of iron absorption in hemochromatosis has given variable results. Some studies show a marked increase in iron absorption (20 to 60% of administered iron) while others have indicated no increase²⁵ (less than 10% of the administered dose). It is evident that iron absorption must be increased in idiopathic hemochromatosis to explain the massive deposits of body iron. Total body stores of iron are increased up to 58 gm. in hemochromatosis as compared with a normal amount of about 4.5 gm.³⁰

The exact nature of the defect in absorption

in idiopathic hemochromatosis is unknown. It seems to be an intrinsic defect that is dependent either on secretions within the intestinal tract that increase the availability of iron or on increased ability of the mucosal cell to take up iron.²⁵

One of the earliest detectable changes in iron metabolism in hemochromatosis is elevation of serum iron and saturation of storage iron. Almost all body tissues show increased iron content. Liver and pancreatic iron is increased 50 to 100 times, heart iron 10 to 15 times, and the spleen, kidney and skin iron about 5 times.²⁵

The treatment of idiopathic hemochromatosis consists of removal of the excess body iron and recognition and supportive treatment of specific organ damage. The average amount of iron in a patient with hemochromatosis is approximately 25 gm. so that about two years of weekly bleeding will be required to deplete iron stores.

Iron Deficiency Anemia.

The earliest change in the development of iron deficiency anemia is contraction of the iron reserve. Thus clinical evaluation of iron reserves should permit early detection of iron deficiency. This evaluation is possible by examination of bone marrow for hemosiderin. It has been shown that normal red blood cell and serum iron values may be associated with no marrow hemosiderin. This represents the subclinical stage of iron deficiency in which there is a lack of storage iron but no other manifestations of iron deficiency.¹⁷

It has been demonstrated that in established iron deficiency in man, iron absorption may increase 5 to 20 times normal.^{12,28} Thus on a diet containing 10 to 25 mg. of iron per day the range of iron absorption varies from 1. mg. to the normal subject to 4. to 5. mg. in iron deficiency.²⁹

It is possible that adults who have absorptive defects or an inadequate diet over many years may become iron deficient on a nutritional basis, even without blood loss.^{8,21} This, however, is the exception. While an inadequate diet and deficient iron absorption frequently contribute to the pathogenesis of iron deficiency they do not seem able to precipitate its development unless iron is lost through repeated pregnancies, chronic hemorrhage or even normal menstrual flow.²¹

The treatment of iron deficiency consists

of correcting the underlying cause and the administration of adequate amounts of iron. The absorption of iron is increased in iron deficiency anemia. However, once the anemia is corrected uptake slows down and iron stores are only slowly rebuilt. Therefore oral administration of iron should be continued for several months after correction of the blood picture.³

In the past it was not feasible to administer iron salts intravenously because of the relatively small amounts that could be administered without causing toxic symptoms. This quantity, about 8 to 10 mg., represents the amount that can be taken up by transferrin. Since iron deficits of 500 to 1000 mg. often exist intravenous iron therapy was not practical. A preparation of ferric hydroxide combined with sucrose has been developed.³¹ This compound is highly effective therapeutically and 100 to 200 mgm. doses may be given. These preparations are quickly taken up by the phagocytes of the reticulo-endothelial system and then slowly released. The indications for intravenous iron therapy are limited. Sacks suggests their use in patients with hypochromic anemia that is unresponsive to oral iron, in persons who show marked gastrointestinal intolerance to iron and in severe iron deficiency anemia late in pregnancy.³

Summary

The physiological concepts regarding iron metabolism were reviewed, including its absorption, transport, utilization, storage and excretion.

The problem of iron metabolism in hemochromatosis and in iron deficiency anemia was discussed in some detail and the problem of parenteral iron therapy was briefly presented.

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POSTOPERATIVE "RESTORATION" OF THE HEMIPELVECTOMIZED PATIENT*

CHARLES J. CHURCHILL, M.D.,^{1**}

R. J. SIMONETTA, M.D.,²

JOHN LYFORD, III, M.D.,³

and

I. MUSS, M.D.⁴

Louisville, Kentucky

THE purpose of this report is to reemphasize that although more tissue is removed from patients undergoing the hemipelvectomy operation than by any other procedure performed on the living human body, such individuals need not be totally disabled; and by means of proper prostheses and training by the physiatrist often can be "restored" to carry on a relatively normal life.

The hemipelvectomy operation has received renewed interest in the last ten years, especially in the larger "cancer centers" in the United States and England.

Girard performed the first successful hemipelvectomy in 1898 but Bilroth had attempted the operation in 1891. Prior to 1949, only 158 cases had been reported but since then the procedure has been carried out more frequently. At the Veterans Administration Hospital, Louisville, Kentucky, this operation has been performed four times using essentially the operative technique described by Sir Gordon Gordon-Taylor and there have been no deaths resulting from the operation. No immediate serious postoperative complications occurred. One patient (Case 4) developed sexual impotence which was thoroughly investigated and was felt to be primarily functional. It eventually improved.

Case Summaries

CASE 1. This 44-year-old carpenter first noted, in 1951, a mass in the right umbilical region. On biopsy this was found to be a malignant melanoma, thought to be metastatic. No primary site was found. The patient complained of vague neurologic symptoms. In August 1953, there was noted in the right inguinal region a node 2 cm. in size, thought by the patient to have been present two years, and to

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- **1. Chief Resident, General Surgery, Veterans Administration Hospital, Louisville, Kentucky.
2. Chief Resident, General Surgery, Veterans Administration Hospital, Louisville, Kentucky.
3. Chief, Orthopedic Surgery Section, Veterans Administration Hospital, Louisville, Kentucky, and Assistant Professor of Orthopedic Surgery, University of Louisville School of Medicine.
4. Chief, Physical Medicine and Rehabilitation Service, Veterans Administration Hospital, Louisville, Kentucky, and Assistant Professor of Physical Medicine, University of Louisville School of Medicine.*

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have increased in size. In November 1953, this node was described as 3 x 8 cm. in size. Biopsy determined this to be an amelanotic melanoma. In December 1953, a right hemipelvectomy was done. The patient died of his disease in February 1955, fourteen months after the amputation. During this postoperative period, except for the last few months prior to his death, he was able to walk on a prosthesis and to care for his tobacco crops—an activity requiring considerable walking and bending.

CASE 2. This 49-year-old salesman first noticed a small mass on his left thigh in 1948, but did not seek medical aid until 1952, when he was advised to have an amputation of the involved leg. This he refused. The mass continued to enlarge, and he sought admission to the Veterans Administration Hospital, Louisville, Kentucky, in October 1955. When admitted to the hospital at that time examination revealed the left thigh to be approximately four times the size of the right. Pathologic sections of material obtained by incision biopsy of the

tumor revealed a well-differentiated liposarcoma. In October 1955, a left hemipelvectomy was performed as a “procedure for cure.” Regional lymph nodes removed at the time of operation were described by the pathologists as showing no evidence of tumor. The patient made an uneventful recovery from the amputation, was provided with a prosthesis, taught to walk, and was discharged from the hospital in March 1956. He died of massive metastases in May 1956. However, this man was ambulatory with a prosthesis and was comfortable for approximately seven months following the hemipelvectomy.

CASE 3. This insurance salesman, 46 years of age, had complained of pain in the right hip for five years. Radiographs revealed an expanding lesion in the upper third of the right femur. Material obtained from this lesion by biopsy was examined by two pathologists, one of whom reported it to be “enchondroma” and the other, “chondrosarcoma.” The patient was



Figure 1



Figure 2



Figure 3

Figure 1. Patient (Case 3), who had large chondrosarcoma, right femur, three weeks after hemipelvectomy.

Figure 2. Same patient as shown in Figure 1, wearing specially constructed prosthesis.

Figure 3. Same patient as shown in Figures 1 and 2, showing appearance when wearing prosthesis, dressed, and working as a salesman.

then sent to the Veterans Administration Hospital, Louisville, Kentucky, where the lesion in the femur was again studied by biopsy, with the pathologic report being "chondrosarcoma." On November 2, 1955, a right hemipelvectomy was performed. Postoperative progress was uneventful, the patient being fitted with a prosthesis, being trained in ambulation by the physiatrist, and finally returning to his work as an insurance salesman. In May 1957, eighteen months after the hemipelvectomy, this patient is still well with no evidence of metastases or recurrence of the tumor.

CASE 4. A carpenter, 47 years old, was admitted to the Veterans Administration Hospital, Louisville, Kentucky, in February 1956, eight months after having fallen on his left thigh. Following this fall, the patient noticed a progressively enlarging mass on his left thigh. The leg was explored by his physician for aneurysm, but a tumor was found. Biopsy of this tumor revealed it to be a synovial sarcoma; and the patient was referred to the Veterans Administration Hospital, Louisville, Kentucky, where a hemipelvectomy was performed in February 1956. Pathologic studies revealed the tumor to have invaded blood vessels and replaced a femoral lymph node. Four months after the operation the patient was doing well, and walking with crutches. This patient was subsequently provided with a prosthesis and adequate training in its use. He was last seen in June 1957, sixteen months after the hemipelvectomy, at which time he was doing well on the prosthesis.

Discussion

These cases of hemipelvectomy are presented, not as examples of surgical skill or technique, but to illustrate certain salient points:

1. In selected instances, hemipelvectomy is an important tool in the physician's armamentarium.

2. Prostheses for hemipelvectomy amputees have been designed, including one developed in the brace shop,⁶ Veterans Administration Hospital, Louisville, Kentucky, which permit adequate and comfortable fitting of the patient with a functional prosthesis.

3. Such a radical loss of tissue as accompanies this operation need not "cripple" a patient since prostheses plus training by the physiatrist can enable such amputees to walk comfortably even if the postoperative length of life

is unexpectedly short. Even if the patient should survive but six months using a suitable prosthesis, his ability to handle his self-care activities by walking alone would justify this procedure. However, some of these patients have survived for an appreciable length of time—eighteen months or more—after the operation, and have been able with the use of the prosthesis to be "restored" so as to return to their former occupations and continue as self-supporting members of society (farmer, salesman, carpenter).

4. von Werssowetz and Painter have fully described the necessary pre- and post-operative steps in the training of a hemipelvectomy patient. It was stressed that balance was an important factor because of the alteration in the center of gravity. It was equally important that the "stump," which actually represented a covering of the pelvic viscera by the gluteus muscle, be prepared for partial weight bearing. To this end, a series of exercises were provided with the stump wrapped in soft material to give the patient the "feel" of an artificial weight-bearing stump.

In essence, we have followed, with some modifications, both this work as well as the work of Cooper and Taylor. In addition, we feel that the pre-operative preparation of the patient's "anticipatory outlook" in preparing him to accept the absence of the extremity and to plan and expect to return to functional activities is of great importance.

Figures 1 - 3 illustrate one case in which a disabling tumor was removed by hemipelvectomy, and the patient "restored" postoperatively.

It is hoped this report will stimulate further interest in this subject, both among surgeons and the referring physicians on whom the patients and their families rely so heavily for advice.

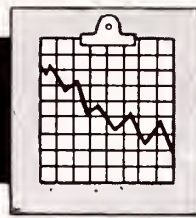
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CASE DISCUSSIONS

From The
University of Louisville Hospitals



PLACENTA PREVIA

Louisville General Hospital

Patient Protocol

History

M. S., a 27-year-old negro gravida 5, para 4, was enrolled in the prenatal clinic with an expected date of confinement of May 27, 1957. She paid several visits to the outpatient clinic, and no abnormalities were noted in the prenatal course. On February 5, 1957, the patient noted an episode of painless bleeding from the vagina. This bleeding was very slight in amount, and the patient did not consider it important. She continued to notice slight bleeding each day, and finally she came to the clinic on February 9. At that time bleeding was moderate, but subsided promptly after the patient had been put to bed.

Physical Findings

On admission, the patient's blood pressure was 120/70, respirations 20, pulse 80 and hemoglobin 9.9 grams. The abdomen was obese, and palpation of the fetus was somewhat difficult. However, the uterus was thought to be enlarged to the size of a 28 weeks' gestation, and the fetus presented in cephalic presentation with the head floating above the inlet. The fetal heart beat was counted in the right upper quadrant at 140, and the sounds were of good quality. The patient was typed and cross-matched, following which she was taken to the delivery room where sterile vaginal examination was performed. The cervix was found to be thick, and to admit one fingertip. Soft tissue thought to be placenta was felt overlying the cervical os.

Treatment and Course in the Hospital

Because of the small size of the baby, it was elected to watch the patient expectantly in the hospital. There was no further bleeding until February 14, 1957, when another episode of painless bleeding took place; this amounted to approximately 600 cc., and required a blood transfusion. During the following night, vaginal spotting continued. On the morning of Febru-

ary 15, 1957, a low cervical transverse cesarean section was performed. This procedure resulted in the delivery of a living premature infant weighing 3 pounds and 4 ounces; the baby was in only fair condition, but survived. The placenta was found to be implanted in the lower uterine segment overlying the internal os.

The patient's postoperative course was uneventful, and she left the hospital in good condition on the seventh postoperative day.

Discussion

DOUGLAS M. HAYNES, M.D., Professor and Head of the Department of Obstetrics and Gynecology: Among the more serious exsanguinating hemorrhages suffered by women in the third trimester of pregnancy, placenta previa occupies a prominent place. By the term "placenta previa" is meant either partial or complete development of the placenta in the lower portion of the uterus. The degree of placenta previa is determined largely by the findings on vaginal examination at the time of the first clinical manifestation of the condition. This manifestation consists of painless hemorrhage occurring suddenly in the third trimester of pregnancy. The patient described above exhibited the condition of total or central placenta previa, the most severe form of the complication, in which the internal os is completely covered by placental tissue. Lesser degrees of the condition are more commonly encountered: partial placenta previa in which the internal os is partially covered by placenta; and marginal placenta previa in which there is no uncovered placenta, but the edge can be palpated on introduction of the examining finger into the cervix.

Placenta previa is encountered approximately once in every 300 third trimester pregnancies. The reason for the abnormal location of the implantation of the zygote is not known. As a result of the Braxton-Hicks contractions of late pregnancy, partial detachment of the placenta

edge occurs, and bleeding takes place from the underlying maternal sinuses. Even though clotting takes place at the site of the hemorrhage, the continued tissue realignment which follows the constant recurrence of the Braxton-Hicks contractions continues to open up more maternal sinuses, and repeated hemorrhages result. The lower the implantation site of the uterus, the earlier in pregnancy the hemorrhagic manifestations of placenta previa will occur, so that the most immature fetuses are likely to be associated with the most severe degrees of the condition.

Clinically, placenta previa should be suspected whenever a patient develops painless bleeding in the third trimester of pregnancy. Typically, the first hemorrhage occurs at night, and the patient rarely becomes exsanguinated by the first bleeding. There is, however, a tendency for each successive hemorrhage to be more severe than the preceding ones. Ordinarily, if no treatment is instituted, spontaneous labor occurs following the second or third episode of bleeding.

The only certain method of diagnosis of placenta previa is the direct digital palpation of placental tissue through the partially dilated cervical os. However, there are practical difficulties associated with the application of this method, as even very gentle palpation of the placental tissue through the partially dilated os may produce serious hemorrhage. Accordingly, the examination must be performed either in a delivery room or an operating room in which immediate preparation for definitive therapy, including abdominal delivery, is available.

The presumptive diagnosis can be strengthened by the use of certain indirect methods, notably air cystography and soft-tissue placentography; these methods were not used in the present case, as immediate vaginal examination was undertaken. Whenever placenta previa

is suspected, the patient must be removed to a suitably equipped hospital. Expectant treatment in the home has no place in the management of placenta previa. Before any examination is attempted, at least 1000 cc. of compatible blood should be cross-matched and ready for administration.

Once the diagnosis of placenta previa has been made by direct palpation, the management will depend upon the size of the baby, the severity of the previa, and the extent of vaginal bleeding. In the present case, although the baby was considered to be of small size and questionable viability, the recurrence of hemorrhage forced the hand of the attending physician, even though expectant treatment had been instituted originally. Since in the third trimester one may expect an increment in fetal weight of approximately one-half pound per week, as long as the patient is not bleeding a certain amount of temporization may be justified when the baby is small. This temporization should not, however, be extended beyond the second hemorrhage.

Although over half of all cases of placenta previa can be safely managed with antecedent rupture of the membranes, vaginal management has no place in the event that the placenta previa is of central variety.

In this case, any attempt at vaginal delivery would involve perforation of the placenta at the point at which it overlies the internal cervical os, and this would in turn entail very severe hemorrhage which would almost certainly be life-endangering. Fetal survival would be very unlikely under these circumstances, and maternal hemorrhage would be extensive. Whenever, therefore, central placenta previa has been diagnosed, the management of choice consists of immediate cesarean section if expectant treatment is ruled out. These principles were followed in the management of the above patient, and the outcome was satisfactory.

As the Spanish proverb says, "He who would bring home the wealth of the Indies, must carry the wealth of the Indies with him." So it is with traveling; a man must carry knowledge with him, if he would bring home knowledge."

—Samuel Johnson



EDITORIALS



THE FORD FOUNDATION—OUR BENEFACTOR

DURING the past year many communities and institutions in Kentucky have benefited in a very substantial measure by the philanthropies of the Ford Foundation. We wish to express herewith our appreciation, as physicians, for its contribution to the welfare and health of our citizens particularly. It must be of interest to us all to learn something of the history, the scope and the stated purposes of this organization of which Mr. Mark F. Ethridge of Louisville is one among fifteen trustees.

The Ford Foundation was incorporated on January 15, 1936, in the state of Michigan by Henry Ford, founder of the Ford Motor Company, and his son, Edsel Ford, as a non-profit organization "to receive and administer funds for scientific, educational and charitable purposes, all for the public welfare." The initial contribution to the Foundation was Edsel Ford's gift of \$25,000 in 1936 at the time of its incorporation. Between 1937 and 1950, through gifts and bequests, the Foundation acquired 94 per cent of Ford Motor Company Class A nonvoting stock. This stock constitutes the bulk of the Foundation's assets.

In its early years the Foundation principally supported Michigan charities. But in 1950 the trustees adopted an expanded program developed by a special study committee. Since that time the Foundation's major concern has been the general advancement of education. It also has supported activities aimed at strengthening the institutions and processes of democracy; promoting stable and productive economic systems; developing new knowledge about the motivations and behavior of men, and fostering international understanding.

By September 30, 1956, when the last fiscal year ended, funds committed by the Foundation since its establishment totaled approximately \$970 million, allocated to some 6,000 institutions and organizations. Of this figure, about \$895 million—or ninety-two per cent—has been devoted to American institutions and undertakings, principally in the field of education.

The remaining \$75 million—or eight per cent—has been spent or allocated as follows: some \$60 million for economic and social development in thirteen nations of South Asia and the Near East and about \$15 million in Great Britain and Europe.

In the last fiscal year—October 1, 1955 to September 30, 1956—the Foundation more than doubled the dollar total of grants and appropriations made in all its preceding history. It increased ten times over the number of grantees which have received support.

The geographic sweep of Foundation activity was broadened measurably. As of October 1950, Foundation grantees were concentrated in twenty-eight communities in sixteen states. Only one grantee at this time was located outside the United States. By October, 1956, there were Foundation grantees in nearly 2,500 communities in all forty-eight states and three territories. In addition, Foundation activity had extended to fifty-four foreign countries.

Approximately two dollars out of every three spent by The Ford Foundation, during the 1956 fiscal year, directly benefited education in the United States. Out of a total commitment of \$602 million, some \$400 million has been designated for the support of basic institutions, such as colleges and universities, and related agencies and activities in the field of education. This total includes the \$210 million set aside to help improve faculty salaries in private colleges and universities. Additional educational commitments made by the Foundation during the 1956 fiscal year included: medical education, \$100 million; the Fund for Adult Education, \$17.5 million; educational television, \$8 million; development of library resources, \$5 million; non-salary teacher benefits, \$5 million; aid to the publication of scholarly works in the humanities and social sciences, \$1,725,000.

Other major actions during the Foundation's last fiscal year were: A \$200 million appropria-

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

tion to extend the community health services of some 3,400 voluntary, nonprofit hospitals throughout the United States and the territories of Hawaii, Alaska and Puerto Rico; nearly \$11 million for mental health research and research training; \$3.5 million to the Institute of International Education to support, for ten years, its program of exchanges of persons, mainly students, between the United States and other countries; \$2.25 million for research professorships in economics; \$1.2 million for research professorships in public affairs.

Of \$602 million dollars donated by this Foundation for the general welfare during 1956, \$311 million has been for health, including medical education. Never in a single year has so great a financial impetus been given by a private foundation for the general purposes to which our lives and work are dedicated. Let us receive it with gratitude, with renewed faith and commitment of our best efforts to use these funds together with our talents and skills for the betterment of mankind.

Sam A. Overstreet, M.D.

A PAUSE FOR EVALUATION

EVERY Kentucky physician should pause now and then to evaluate his State Association. What does it do? What are his obligations?

The first consideration of the century-plus KSMA is public welfare. Next, it tries to meet the needs of the profession as a whole. Third, it performs many services for the individual doctor.

The worth of these individual services, pouring out over the Commonwealth from Mills Point to the Big Sandy, depend upon the degree of the doctor's dedication. He gets out of his membership only what he puts into it.

Organized as a tool through which its members might accomplish particular things they could not do alone, the KSMA has kept public welfare at its core. It helps to place physicians in needed areas, insists upon high professional and ethical standards of the State's doctors, strives for medical representation on community health programs, protects the people against frauds in the profession, promotes insurance plans to help the patient pay for medical service. One of the Association's most selfless phases is its promotion of the field of preventive medicine—diabetes detection, TB control, etc.

In serving the profession, the KSMA strives for greater recognition and appreciation of the public contributions of its membership. It serves as a watchdog of the legal status of medical services, safeguards against political control of private practice, offers advanced scientific training to general practitioners and specialists alike at its meetings, and stresses the ties that unite the profession while trying to eliminate the factors that would divide it. Its closely-knit procedures provide far-reaching opportunity for organized accomplishment that a lone physi-

cian could never attain.

The KSMA's third function—individual service—is given according to the willingness of the Kentucky doctor to receive it. He must join the organization before he can receive information of the aims and activities of his professional brothers—information continually pouring out from the Headquarters office. He must attend meetings before he can reap the value of scientific instruction. He must make his wishes for organizational improvement known before they can be considered by the KSMA governing bodies. He must cooperate in working for the good of all before he can profit from the aftermath of personal benefits and protection.

While the percentage of Associational participation in Kentucky is slightly higher than in the average of other states across the U. S., the actual work is carried on by a relatively small number. And the indifference of so many doctors is discouraging to those who give freely of their time and talent and are content to remain unhonored, unsung and unpaid.

What then is the obligation of the Kentucky doctor to his State Association. It is profound in that it must be sincere. It demands a recognition of the worth of organized medicine and a willingness to follow its leadership. It calls for loyalty and cooperation toward mutual achievement. And yet, it may be fulfilled simply, if the doctor will:

1. Join the Association and pay dues regularly
2. Attend meetings
3. Learn its policies
4. Give active support to its projects

Neither the Kentucky State Medical Association nor any Kentucky doctor can discharge the fullest service without the other.



ORGANIZATION SECTION



Diabetes Detection Drive Starts on November 17

This year's Diabetes Detection Drive is scheduled for the third week in November, rather than the second as in the past, and all KSMA members are urged to note the dates November 17-23 as times for the drive, according to Carlisle Morse, M.D., Louisville, Chairman of the KSMA Diabetes Committee.

"We believe the 1957 drive will again succeed in its two-fold purpose of educating our people about the dangers of diabetes and aid in the discovery of previously unknown diabetics," said Doctor Morse.

All members of the Association are urged to give free urine sugar tests to those persons requesting them during the drive which KSMA sponsors in cooperation with the American Diabetes Association.

Physicians may obtain free materials to be used in the campaign from their county medical diabetes committee.

"In the past, the Diabetes Detection Drive has been accepted favorably by the public," Doctor Morse said. "The drive renders a great public service, with approximately 900 new diabetics discovered through these special efforts—900 people, who, armed with the knowledge of their condition, can now lead happy, useful lives."

KSMA Announces Priority System for Asian Flu Vaccine

All KSMA members are urged to cooperate with their local county health authorities in developing programs of immunization for Asian flu which will meet the special needs of their communities, according to Richard R. Slucher, M.D., Buechel, who was president of KSMA at the time the program was drawn up.

C. C. Howard, M.D., chairman of the KSMA Committee on Public Health which drafted the plan, has announced a priority system for use of the vaccine, aimed at preventing "paralysis" of a community in case of an epidemic of Asian flu.

The vaccine will be distributed under voluntary basis to each state on a population basis. Kentucky will receive 1.8 of the total U. S. supply.

Until the supply is ample, the Association asks your support of the following recommendations and asks that you use your best judgment in following these priorities in the light of community needs.

1. Those who treat the sick.
2. Those in essential community services. Included in this group are policemen, firemen, food han-

dlers, utilities and transportation workers and school teachers.

3. Poor risks and school children (included in the first are TB and heart patients, the very old and infants). Since school premises may become a "breeding ground" for the virus school children should be immunized as soon as possible.
4. All others.

AMA to Hold Clinical Sessions in Philadelphia, Dec. 3-6

Philadelphia's historic Convention Hall will be the scene of the American Medical Association's eleventh clinical meeting on December 3-6.

Highlights of the three and one-half day convention for the nation's physicians will include: a special trans-Atlantic conference between distinguished physicians in London and Philadelphia on "Advances in Chemotherapy of Cancer" via two way telephone and a complete color television schedule of surgical demonstrations emanating from Lankenau Hospital.

Supplementing the regular scientific exhibits will be special exhibits on the history of medicine in the Philadelphia area and fractures and manikin demonstrations on problems of delivery. Panel discussions on cardiovascular disease, cancer, emotional problems of menopause, hypertension, diabetes, arthritis, and traumatic injuries will be part of the scientific program.

AMA's General Practitioner of the Year Award will be presented to an outstanding family doctor at the meeting. Meetings of the House of Delegates are scheduled for the Bellevue-Stratford.

Dr. Hancock on SMA Council

J. Duffy Hancock, M.D., Louisville, has been appointed to succeed A. Clayton McCarty, M.D., Louisville, as Kentucky's representative on the Council of the Southern Medical Association.

Doctor Hancock's five-year term on the Council will begin at the close of the SMA meeting in Miami Beach in November. Doctor McCarty, present chairman of the Council, whose term expires at the end of the meeting, has served the maximum constitutional limit and is not eligible for reappointment.

1957 Annual Meeting News

Full details on the 1957 Annual Meeting, which ended as this issue went to press, will be carried in the November issue.

Two Hospital Groups Announce New Code of Ethics

A new revised Code of Ethics for hospitals and hospital administrators has been announced by the American Hospital Association and the American College of Hospital Administrators.

The revision, which supplants a Code adopted by the two organizations in 1939, was prepared by a joint committee representing both groups. The two ten-point statements on ethical principles and operational procedures follow.

Hospital Ethics

1. Recognizing that the care of the sick is their first responsibility and a sacred trust, hospitals must at all times strive to provide the best possible care and treatment to all in need of hospitalization.

2. Hospitals, cognizant of their unique role of safeguarding the nation's health, should seek through compassionate and scientific care and health education to extend life, alleviate suffering, and improve the general health of the communities they serve.

3. Hospitals should maintain and promote harmonious relationships within the organization to insure the proper environment for the considerate and successful care and treatment of patients.

4. Hospitals should appreciate and respect individual religious practices and customs of the patient.

5. Hospitals, to the extent possible, should conduct educational projects, stimulate research, and encourage preventive health practices in the community.

6. Hospitals should cooperate with other hospitals, health and welfare agencies, governmental and private, and other recognized organizations interested in promoting the health of the nation.

7. Hospitals in reporting their work to the public should give a factual and objective interpretation of accomplishments and objectives without disparaging the work of other hospitals or related organizations.

8. Hospitals should actively support and encourage every effective method which will ease the financial burdens of illness.

9. Hospitals should be fair, honest, and impartial in all their business relationships.

10. Hospitals should be progressive in policies, personnel practices, and efforts to maintain up-to-date equipment, methods, and standards of performance.

Principles of Conduct for Hospital Administrators

The hospital administrator's life is dedicated to the highest possible level of performance in the competent and humane hospital care of the sick, in health education in all its many phases, and in research conducted in the interest of hospitals and their patients. In pursuing these objectives the hospital administrator should be guided by the following principles.

1. He will not use his position or influence for selfish personal advantage or gain and will not disparage the work of his colleagues.

2. As the official representative of the hospital's governing body and often the hospital's governing body and often the hospital's spokesman in the community, his conduct will at all times be dignified and exemplary. His professional performance will be objective and fair, with the patient's best interest as the ultimate consideration.

3. In his relationships with personnel and staff he will be impartial, tolerant, fair, and interested in all reasonable means of promoting personnel morale and welfare, consistent with the hospital's best interest and ability to provide them.

4. The administrator will encourage, assist, and teach others the principles and practice of hospital administration

to the end that future hospital administrators may be more adequately prepared.

5. The administrator will encourage and participate, to the extent possible, in a broad educational program to assure the health workers necessary to the hospital field.

6. He will contribute his interest, support, and leadership toward the general improvement of the community, with especial emphasis on health education and related causes. In so doing he will attempt to avoid involving his hospital in partisan political issues.

7. In his relationships with the Medical Staff of the hospital he will support that which is constructive, sound, and in the interests of good hospital professional practice; he will resist and oppose that which is, in his judgment, harmful, destructive, or unwise.

8. The administrator will seek constantly to improve his professional knowledge and skill and will accept counsel and guidance, particularly in fields and subjects with which he is not entirely familiar.

9. Recognizing that his is a position of public trust, he will, within the limitations imposed by good judgment, legal considerations, and his hospital charter respect the rights, privileges, and beliefs of others regardless of race, color, or creed. He will keep confidential whatever he may learn respecting the private affairs or character of patients and their families, physicians, and others with whom he is associated in the hospital. When his administrative duties bring him into conflict with any segment of society or belief, he will deal with the situation with the greatest consideration, courtesy, and respect for the individual that is possible, without ridicule or animosity.

10. He will exemplify the Golden Rule in thinking, action, and conduct.

KSMA Members Urged to Vote in November Elections

All members of KSMA are urged to exercise their privilege to vote by participating in the November 5 elections for city, county, and state officials, by the KSMA Committee on Legislation headed by Thomas P. Leonard, M.D., Frankfort.

A person must be at least 18 years of age, a resident of the state of Kentucky for one year on or before November 5, and be registered in order to vote in the coming elections.

Any citizen who expects to be absent from his county of residence may vote an absent voter's ballot. Application for the absentee ballot must be in the hands of the County Clerk at least ten days prior to the election.

Members of the Armed Forces or government employees abroad may vote an absent voter's ballot without previously registering, providing they apply ten days prior to the election and meet all other requirements.

Associate Clinical Director Named

Sarah H. Hardwicke, M.D., has been appointed Associate Clinical Director for the ten Memorial hospitals in Kentucky, West Virginia and Virginia. A graduate of Johns Hopkins in 1939, Doctor Hardwicke who was formerly secretary of the Council on Professional Practice for the American Hospital Association will assume her new duties in Washington, D. C., headquarters on November 1. She will assist Gordon Meade, M.D., clinical director for the 10 hospitals serving beneficiaries of the United Mine Workers Retirement and Welfare Fund.

NO KNOWN CONTRAINDICATIONS

ROLICTON[®]

permits high dosage,
more effective diuresis in more patients

The low incidence of side action with Rolicton (brand of amisometradine) permits high dosage, extending the range of effective diuresis to a greater number of patients than was previously possible.

Laboratory studies demonstrate that Searle's new oral diuretic, Rolicton, causes positive diuresis with an essentially balanced excretion of water, sodium and chlorides.

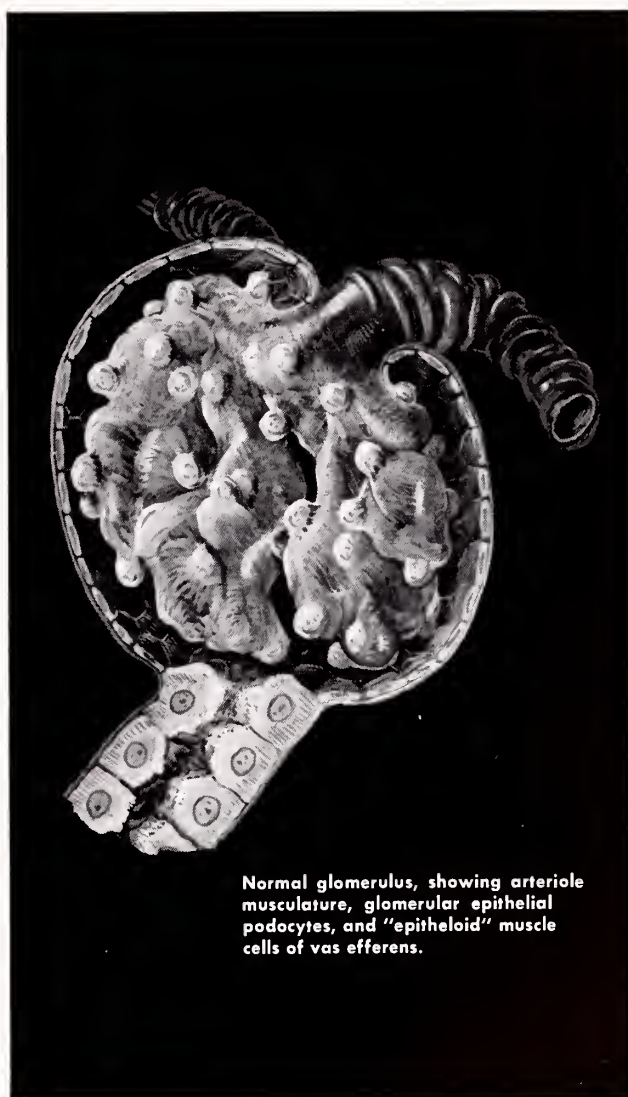
Settel¹ studied the effect of Rolicton in forty-seven patients and found no serious side effects. Assali, who observed the action of Rolicton in five patients with severe toxemia of pregnancy, states² that side actions are essentially nonexistent. Side actions of such low incidence, together with its diuretic efficacy, suggest a high order of usefulness for Rolicton.

One tablet of Rolicton, b.i.d., is usually adequate to maintain patients free of edema after the first day's dosage of four tablets. Some patients respond well to one tablet daily. G. D. Searle & Co., Chicago 80, Illinois. Research in the Service of Medicine.

1. Settel, E.: Rolicton[®] (Aminoisometradine), a New, Nonmercurial Diuretic, *Postgrad. Med.* 21:186 (Feb.) 1957.

2. Assali, N. S.: Personal communication, May 28, 1956.

SEARLE



Normal glomerulus, showing arteriole musculature, glomerular epithelial podocytes, and "epitheloid" muscle cells of vas efferens.

U. L. and U. K. Pledge Good Will In Developing Med Centers

Cooperative rather than competitive efforts relative to medical center development were urged by officials of the University of Kentucky and the University of Louisville in a joint good-will statement.

The statement which said in part, "The two universities are convinced that their role can be discharged most effectively and economically by cooperative rather than competitive spirit," was signed by President Frank Dickey and Dean William Willard of the University of Kentucky and President Philip Davidson and Dean Murray Kinsman of the University of Louisville.

The University of Kentucky's new \$25 million medical center will be open to students in 1959. It will be some time before work is started on the University of Louisville's new center—which will include new school building, hospitals, a research building, and residences.

Closed Circuit Telecast, Nov. 13 on Coronary Disease

Nationally known authorities, including Paul Dudley White, M.D., of Boston, will discuss "Coronary Disease" on Grand Rounds #6, a closed circuit television program which will be relayed to the Grand Ballroom of the Seelbach Hotel in Louisville on November 13 from 8 to 9:30 p.m. CST.

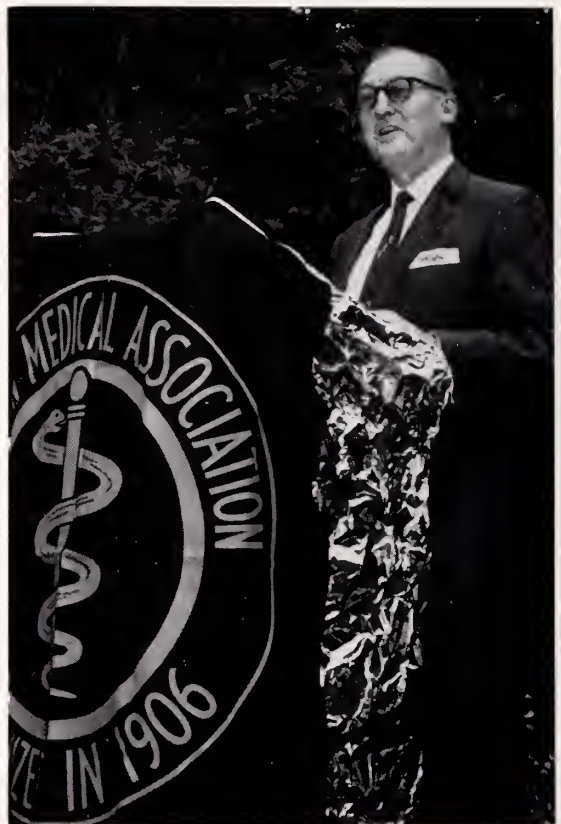
The program, "Three Key Questions in Coronary Disease: 1. What is the Place and Value of Surgery? 2. What is the Role of Dietary Fats? 3. Is Long Term Anticoagulation Worthwhile?" is one which should be of interest to all KSMA members. As the Journal goes to press, it is expected that the program will qualify for Category I credit in the American Academy of General Practice.

Broadcast through the facilities of the Upjohn Company, Grand Rounds #6 will include the following participants: Ancel Keys, M.D., and Clarence W. Lillehei, M.D., University of Minnesota; Edward H. Ahrens, Jr., the Rockefeller Institute for Medical Research; Charles P. Bailey, M.D., Hahnemann Medical College; Claude S. Beck, M.D., Western Reserve University School of Medicine; William Dock, M.D., State University of New York School of Medicine; Donald Brian Effler, M.D., Frank E. Bunts Institute; J. N. Norris, M.D., Social Medicine Research Unit, London, England; and Paul Dudley White, M.D., Harvard Medical School.

Clinical Conference in Lexington

A Fall Clinical Conference, conducted by the Lexington Clinic and featuring scientific papers and symposia, will be held October 25-26 in the Lafayette Hotel in Lexington.

This is the second Fall Clinical Conference sponsored by the clinic. Symposia on hypertension and malignant tumors of the head and neck will be included in the two-day program.



A. Clayton McCarty, M.D., Louisville, Chairman of the Council of the Southern Medical Association and Councilor from Kentucky is shown addressing the physicians and state and civic leaders who attended the ground-breaking ceremonies for the SMA \$225,000 building in Birmingham. Located on a one-acre plot of ground, the modern structure will symbolize the beginning of the second half century of the Association's progress.

Offer Prizes for Surgical Papers

Senior medical students, interns, and residents are eligible to compete in a contest sponsored by the Kentucky Surgical Society offering prizes for the top three papers written on a surgical subject.

First prize is \$100, second prize \$50, and third prize \$25. Papers should be sent to the Secretary of the Kentucky Surgical Society, C. Melvin Bernhard, M.D., 1009 Brown Building, Louisville 2. After November 15, Doctor Bernhard's address will be 1169 Eastern Parkway, Louisville, 17. Contest deadline is January 1, 1958.

Basic Sciences Building Dedicated

Ceremonies for dedication of a new Basic Sciences Building in the Medical Center of West Virginia University were held on Saturday, October 5, in the Center's auditorium.

August Issue Omission

Through an oversight, the fact that the paper, "Obstruction of the Colon," by Branham B. Baughman, M.D., Frankfort, was presented at a meeting of the Kentucky Surgical Society in Lexington, May 17-18, was omitted from the August, 1957 issue.

Five Kentucky Physicians Attend Public Relations Institute

Five Kentucky physicians registered at the 1957 Public Relations Institute, sponsored by the American Medical Association at the Drake Hotel in Chicago on August 28 and 29.

Registered were: Irvin Abel, Jr., M.D., Louisville; Daryl Harvey, M.D., Glasgow; Marvin Lucas, M.D., Louisville; George Riley, M.D., Erlanger; and Carroll Witten, M.D., Louisville.

The Institute heard Robert Clark, staff writer on the Louisville Courier Journal, discuss "Working Press in Covering Medical Stories." He participated in a panel following his presentation.

Another participant in a panel during one of the four simultaneous sectional meetings on the 28th was Harry A. Lehman, Louisville, executive secretary of the Jefferson County Medical Society. The field secretary and executive secretary of KSMA were also in attendance.

Chest Disease Symposium to be Held on October 30

A Symposium on Chest Diseases will be held at the District 5 State Tuberculosis Hospital in London the afternoon of Wednesday, October 30, according to T. H. Biggs, M.D., medical director at the hospital.

"Surgical Aspects of Intestinal Tuberculosis" will be discussed by Robert Pennington, M.D., consultant surgeon at the hospital. Boyce E. Jones, M.D., consultant in chest diseases at the hospital, will have as his topic, "Home Treatment of Pulmonary Tuberculosis."

The program will open with the first hour of a new refresher course, approved by the American Academy of General Practice. Topic will be "Interpretation of Chest Roentgenograms" by Walter L. Stilson, M.D., and Erling Tobiasen, M.D., on Vue-Vox, a new system of color film tapes and magnetic tape prepared at the College of Medical Evangelists, Los Angeles.

Reader's Digest Quotes Dr. Norvell

The Reader's Digest of September, 1957, quotes Wyatt Norvell, M.D., New Castle, of the Kentucky Rural Health Council in an article entitled, "Near Life, Near Death, Near God." In the article, which previously appeared in the Journal of the American Medical Association, Doctor Norvell is quoted as saying, "It is impossible to figure out the human body without taking into consideration a Supreme being."

"Safe Road" Show on the Air

As a public service in the interest of saving lives, Blue Cross-Blue Shield are presenting the "Safe Road" program over radio station WGRC (79 on your dial) Mondays through Fridays from 4:55 to 5:00 p.m. through January 1. All KSMA members are urged to listen and to encourage others to do so.

STUDENT AMA

With the inception of a new academic year, the Student AMA is busy accepting new members from freshmen classes at medical schools all over the country. This is certainly the case locally.

Because of the close association here between state and student groups, the student benefits more broadly in his experiences with organized medicine. When a student becomes a member of SAMA at the University of Louisville School of Medicine, he automatically becomes a student member of the Kentucky State Medical Association also and receives a four year subscription to the Journal of the KSMA. It is generally felt that this double exposure of the student to organized medicine, per se, is educational.

The most obvious opportunity for SAMA members as a group to participate in KSMA affairs occurs at the time of the Association's Annual Meeting. This year, as in the past, SAMA has been enthusiastically represented almost to the last member. The student member's attraction for conventions and annual meetings is well known, even legendary.

Speaking for the group as a whole, I would like to extend our thanks to the KSMA for inviting us to its interesting and obviously important Annual Meeting. KSMA conventions constitute a singular experience in the life of the local medical student; we are appreciative of this experience. This year officers of the local SAMA Chapter were asked to represent their organization at the Presidents' Luncheon and were delighted to have this opportunity.

The benefits to the KSMA from its association with SAMA are not as readily apparent. If, however, one looks ahead to the time when SAMA members are, at long last, practicing physicians it will be realized that many will also be KSMA members. It is generally considered that the student's first hand experience with organized medicine will stand him in good stead as a member of the state medical association. Indeed, it will help him to be a strong and intelligent member of this association.

Clarke Anderson, President
U. of L. Chapter, Student AMA

Farm-City Week Nov. 22-28

The national committee for Farm-City Week, November 22-28, has invited all state and county medical societies to join in a program to "build better relationships between town and country neighbors."

As in the past two years, this observance will be conducted nationally and locally by hundreds of civic, industrial, agricultural, professional and youth organizations—spearheaded by Kiwanis International. The American Medical Association which is represented on the Farm-City Board of Directors, is recommending that county and state societies highlight their urban and rural health services during this week.

Dr. Gaither Honored by Rotarians

Gant Gaither, M.D., KSMA president in 1955-56, was honored by the Hopkinsville Rotary Club on August 20 at a special program paying tribute to his contributions to the betterment of the community. Doctor Gaither, who retired from his surgical practice in January of this year, is the fifth to be honored in the "Bouquets to the Living" programs, which were inaugurated seven or eight years ago. His contributions to the moral and social life of the community were cited.

Gastroenterologists Meet in Boston

The twenty-second annual convention of the American College of Gastroenterology will be held at the Hotel Somerset in Boston on October 21, 22, and 23, according to Sam Overstreet, M.D., Governor of the Kentucky Chapter of the College.

Besides many individual papers, there will be panel discussions on Chronic Ulcerative Colitis, Diseases of the Esophagus, and Peptic Ulcer. In the three days following the sessions there will be a course in post-graduate gastroenterology.

Gynecological Clinic Established

A gynecological clinic has been established at Norton Memorial Infirmary in Louisville and is held each Thursday from 10:00 a.m. to 12:00 noon.

The clinic will be "limited to the medically, or otherwise indigent" and "for the present, admissions will be limited to white female patients." Referrals will be accepted from physicians anywhere in Kentucky and social agencies. There will be a registration fee of one dollar for those able to pay.

Open Nursery for Retarded Children

The Highland Younger Woman's Club is sponsoring a nursery school for mentally retarded children (up to eight years of age) from 9 a.m. to 12 noon every Thursday in the basement of the First Christian Church on Fourth and Breckinridge.

The school opened on October 3 and is staffed by trained mothers and volunteers from the club. There is no charge. For further information call Joanne Sawyer between 8:30 a.m. and 5 p.m. at JU 3-8855.

A new medical Journal, "Arthritis and Rheumatism; The Official Journal of the American Rheumatism Association," will appear bi-monthly, starting with the January-February, 1958 issue. Editor of the new journal will be William S. Clark, M.D. Contents of the publication will be selected to appeal not only to the specialist in rheumatic diseases, but also the internist, orthopedic surgeon, research worker, and all practitioners with a special interest in these diseases.

The second Cruise Congress of the Pan American Association of Ophthalmology is scheduled for February 1-4 on board the S. S. Queen of Bermuda. The itinerary includes a day each in San Juan, Puerto Rico; Ciudad Trujillo, Dominican Republic; Kingston, Jamaica; Port-au-Prince, Haiti, and Nassau, Bahama Islands. Symposia, papers, motion pictures, and exhibits will be included on the program.

Your Opinion is Needed, Doctor

What do you think of your KSMA Journal? In order to help your editor and his staff in their continuous efforts to improve your Journal, we urgently request that you complete the readership survey on page 917 entitled, "Doctor, We Need Your Opinion." Your cooperation in mailing this completed sheet to the Journal of KSMA, 1169 Eastern Parkway, Louisville will be appreciated.

New KSMA Members

Five new members have been added to the KSMA roster since the Journal's last report. They are:

D. L. Boucher, M.D., Lexington

D. H. Johnston, M.D., Lexington

Paul E. Lett, M.D., Lancaster

Leo C. McCampbell, M.D., Elizabethtown

Nelson B. Rue, Jr., M.D., Bowling Green

Dr. Blackwelder At Western State

Robert Guy Blackwelder, M.D., has been named superintendent of Western State Hospital, Hopkinsville, according to H. L. McPheeters, Commissioner of Mental Health.

Doctor Blackwelder, a graduate of the Medical College of Virginia in Richmond, assumed his new duties on September 9. He has been on the staff of mental hospitals in Maryland, North Carolina, and West Virginia and was superintendent of Eastern Shore Hospital in Cambridge Maryland from 1949-53. He was on the staff of Western State from 1952-54.

Christmas Cards Still Available

KSMA members who have not yet had an opportunity to order the Christmas cards being sold by the Woman's Auxiliary, may do so by contacting Mrs. Victor Dalo, 2179 Emerson St., Louisville, before December 3. The cards, showing a winter scene of the McDowell House, are priced at ten dollars per hundred. Proceeds will go to the American Medical Education Foundation.

The American College of Chest Physicians is offering three cash awards to winners of the 1958 Prize Essay Contest which is open to undergraduate medical students throughout the world. Essays for the contest which closes on April 15, 1958, may be written on any phase of the diagnosis and treatment of chest diseases. For application and further information please write: American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

The Van Meter Prize Award of \$300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid will be awarded at the annual meeting of the American Goiter Association in San Francisco, California June 17, 18, and 19. Essays should be sent to John C. McClintock, M.D., 149½ Washington Avenue, Albany, New York, not later than February 1. They should be typed in duplicate and should not exceed 3000 words.

DOCTOR

we need your opinion

For the purpose of continuous improvement of your STATE MEDICAL JOURNAL — in reading content — original articles, editorials, news, economics and other subjects pertaining to statewide and national affairs, it is urgently requested that you spare a few moments to fill in and return this questionnaire.

YOUR RESPONSE TO QUESTIONS BELOW WILL BE MOST HELPFUL

MORE

LESS

Indicate your choice on scientific papers _____

Editorials _____

Special Articles (socio-economic and professional business problems, etc.) _____

News items and personals _____

Book Reviews _____

Features to be added or increased _____

Features to be deleted or decreased _____

Indicate your favorite department or feature _____

Do you read your STATE MEDICAL JOURNAL?

Every month _____ Frequently _____ Occasionally _____

Do you read advertisements? Regularly _____ Occasionally _____

Please indicate one product advertised of particular interest to you in last two issues

Name medical journals you read in order of interest: Indicate position you would give your State Medical Journal:

1. _____ 4. _____

2. _____ 5. _____

3. _____ 6. _____

PLEASE RETURN THIS PAGE TO

The Journal of
The Kentucky State Medical Association
1169 Eastern Parkway
Louisville, Kentucky

In Memoriam

OLIVER HOLT KELSALL, M.D.

Louisville
1878-1957

Oliver Holt Kelsall, M.D., a physician and surgeon for 56 years prior to his retirement two years ago, died at his home in Louisville on September 4.

Doctor Kelsall formerly was on the faculty of the University of Louisville Medical School, and in 1944 was elected president of the staff of the old Deaconess Hospital. A graduate of the University of Louisville School of Medicine in 1899, he was also on the staffs of the Kentucky Baptist and SS. Mary and Elizabeth Hospital.

CLYDE McNEIL, M.D.

Louisville
1894-1957

Clyde McNeil, M.D., 63, who was recognized as an expert in the field of radiology, died of a coronary ailment at his home in Louisville on August 25.

Doctor McNeil, a graduate of Johns Hopkins University Medical School in 1920, was an associate professor of radiology at the University of Louisville School of Medicine in 1920, radiological consultant at Veterans Hospital, and served on the staffs of Norton

Memorial Infirmary and SS. Mary and Elizabeth Hospital. He was the author of the textbook, "Roentgen Technique."


PERTINENT PARAGRAPHS

The third annual Medical Education Week, nationwide tribute to the progress of American medical schools, will be promoted April 20-26 by medical schools and the medical profession. Purpose of the week is to create a greater understanding among the public of both the achievements and the problems of medical schools. The American Medical Association, one of the sponsors, is asking its members to reserve this week for community and nationwide salutes to area medical schools.


A new how-to-do-it organizational manual for medical assistants will be introduced at the second national convention of the American Association of Medical Assistants in San Francisco, October 4-6. Titled "Take-off Techniques," the manual has been edited by leaders in assistants groups around the country and published by the AMA's Public Relations Department.

The University of Indiana Medical Center has announced that its outpatient and diagnostic center at Riley Hospital will be enlarged through an \$80,000 gift from the Indiana Kiwanis clubs.


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News Items

Jack C. Collings, M.D., a graduate of the University of Louisville Medical School in 1955, has opened an office in Owensboro for the general practice of medicine. A native of Calhoun, Doctor Collings interned at the University of Oklahoma Hospital where he also took residency training.

Edwin W. Nolan, M.D., who will limit his practice to Ophthalmology, has opened an office in St. Matthews. A graduate of the University of Louisville School of Medicine in 1953, Doctor Nolan interned at St. Joseph's Hospital in Louisville and took his residency training at the Veterans Administration Hospital, also in Louisville.

William F. Schnitzker, M.D., is now associated with Guy C. Cunningham, M.D., in the practice of Pediatrics. Doctor Schnitzker, who graduated from the University of Maryland Medical School in 1947, interned at Mercy Hospital in Baltimore and took his residency training in pediatrics at Children's Hospital in Louisville. He is a Fellow of the American Academy of Pediatrics.

The annual convention of the National Society for Crippled Children and Adults will be held October 31-November 2 in Chicago's Palmer House, according to announcement by Dean W. Roberts, M.D., executive director. James B. Johnson, M.D., Newark, Ohio, is chairman of the 1957 meeting.

IN THE BOOKS

(Continued from Page 868)

designation "sarcolemma" would hardly be acceptable, since this structure is known to be below the resolving power of the light microscope. Two illustrations, Figure 23-2 digestive tract, and Figure 30-20 endometrium are not clear, too much in too little space.

This edition has 91 electron micrographs, many contributed by leading American scientists. These are not fully incorporated into the text, or fully interpreted. Some, however, illustrating the structure of the cell, the myelin sheath, and uriniferous tubule, add a good deal to our information.

Some structures seem inadequately covered, in this otherwise comprehensive volume, such as the anal canal, the male and female urethrae, the impulse conducting system of the heart and the components of Waldeyer's ring. Some good illustrations, with explanatory text of these, might add something to the book.

To conclude, this edition is a storehouse of information with excellent bibliographical references at the end of each of its thirty-three chapters. It is a book every anatomist and pathologist would want at his elbow.

S. I. KORNHAUSER, Chairman
Department of Anatomy
University of Louisville
School of Medicine

when anxiety and tension "erupts" in the G. I. tract...

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PUBLIC HEALTH PAGE

(Continued from Page 876)

that the Surgeon General first establish procedures to study systematically serious complications of influenza, particularly deaths, and the methods of their prevention; and that these findings be reported to all interested groups.

Asian Influenza in the United States

Asian influenza continues to be noted throughout the United States. However, it appears thus far to be localized in sporadic outbreaks, particularly in schools in Louisiana, Georgia, Michigan and Utah during the first two weeks of September. There have been, however, no epidemic outbreaks in this country thus far.

Asian Influenza in Kentucky

Although it has been expected, there has been no localized outbreak of Asian influenza in late August or early September in Kentucky. There have been no school outbreaks of this disease thus far. It is true there have been a large number of severe upper respiratory influenza-like diseases reported in the state. However, these do not appear to be influenza. Our new State Virus Laboratory has examined

specimens from over six hundred of these cases and has shown that most of the cases reported as Asian influenza have not been influenza. Only sporadic laboratory confirmed cases of Asian influenza or any influenza have appeared throughout the state in August and September.

Nevertheless, the continued presence of sporadic cases of Asian influenza means that Kentucky is properly seeded with this virus. A constant watch is necessary to determine what time this infection might break out in epidemic form. Physicians are urged to promptly report all suspected cases of influenza to their local health officials. Local health officers have just been called in to the state office and provided with the most recent information on current developments. They and their staff are prepared to assist the physician and his county society in any way which is deemed appropriate when requested to do so.

Physicians are also urged to make use of the State Virus Laboratory for laboratory diagnosis of all suspected influenza cases. Only in this way will we be able to tell when to expect an epidemic of the new Asian influenza. The cooperation of all physicians will be greatly appreciated.

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Thiamine mononitrate	1.0 mg.
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Pantothenic acid (Panthenol)	1.5 mg.
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Clinical Results with Aralen in Rheumatoid Arthritis

Author	No. of Cases	Major Improvement	Minor Improvement	No Effect
Haydu ¹	28	22	5	1
Rinehart ²	25	12	4	9
Freedman ³	50	43	3	4
Bagnall ⁴	108	77	12	19
Bruckner ⁵	36	32	0	4
Cohen and Calkins ⁶	22	17	3	2
Scherbel et al. ⁷	25	9	8	8
Total	294	212 (72%)	35 (12%)	47 (16%)

- Success dependent upon persistent treatment
- Often of benefit where other agents have failed
- Remissions on therapy well maintained
- Remission of 3 to 12 months possible even if treatment is interrupted
- Tachyphylaxis not evident

GENERAL EFFECTS:

- Patient feels better
- Patient looks better
- Exercise tolerance increases
- Walking speed and hand grip improves

LABORATORY EFFECTS:

- E. S. R. may fall slowly
- Hemoglobin level may gradually rise

ANALGESICS AND STEROIDS:

- Requirements usually reduced or eliminated

JOINT EFFECTS:

- Pain and tenderness relieved
- Mobility increases
- Swellings diminish or disappear
- Muscle strength improves
- Rheumatic nodules may disappear
- Even severe or advanced deformity may improve
- *Active* inflammatory process usually subsides
- Joint effusion may diminish

DOSAGE:

Aralen is cumulative in action and requires four to twelve weeks of administration before therapeutic effects become apparent.

Latest information indicates that an initial dose of 250 mg. of Aralen phosphate is preferable to the higher doses sometimes recommended. However, If side effects appear, withdraw Aralen for several days until they subside. Reinstate treatment with 125 mg. daily and, if well tolerated, increase to 250 mg. The usual maintenance dose is 250 mg. daily.

New Chemotherapy

INDICATIONS:

- Rheumatoid arthritis, acute or chronic
—with or without adjunctive therapy.
- Spondylitis
- Arthritis associated with lupus
erythematosus or psoriasis

HOW SUPPLIED:

Aralen phosphate: 250 mg. tablets in bottles of 100 and 1000.
125 mg. tablets in bottles of 100.

Tolerance:

Aralen is usually well tolerated. Toxic effects are usually mild and to date have been transitory in nature, disappearing completely either on continuance or cessation of therapy or on reduction in dosage.

Gastrointestinal disturbances (e.g. nausea, rarely vomiting, diarrhea, abdominal cramps, anorexia) are frequent manifestations of intolerance. Temporary blurring of vision (due to interference with accommodation) is also relatively frequent.

Pleomorphic skin eruptions (e.g. lichenoid, maculopapular, purpuric), although generally mild, may preclude the use of an optimum dosage schedule. If a skin reaction persists on a reduced dosage schedule, or recurs after reinstitution of treatment with gradually increasing doses, discontinue Aralen till the lesion again disappears and consider resuming treatment with Plaquenil® (brand of hydroxychloroquine).

Less frequently transitory vertigo, headache, lassitude, or neurological disturbances, such as nervousness, irritability, emotional change, and nightmares have been reported. Instances of unexplained slight gradual weight loss as the patient's general health and arthritic condition improved have been mentioned. Occasional instances of bleaching (depigmentation) of the hair have been described.

Although an occasional instance of leukopenia, with normal differential count, has been reported (WBC about 3000), it has not proved troublesome because it has always been reversible on discontinuance, or diminution of the dose. Even spontaneous reversal may occur while full dosage is maintained.

THEORY OF ACTION:

Aralen appears to suppress or induce remission of rheumatoid inflammatory processes by inhibiting adenosinetriphosphatase.

Caution:

Aralen is known to concentrate in the liver and, although hepatic damage has never been reported, the drug should be used with caution in the presence of liver disease. In the presence of severe gastrointestinal, neurological, or blood disorders, the drug should be used with caution or not at all. If such disorders occur during the course of therapy, the drug should be discontinued. Concomitant use of gold or phenylbutazone with Aralen should be avoided because of the tendency of these agents to produce drug dermatitis.

Clinical Comments:

Of fifty patients receiving Aralen therapy, "43 have become really well; that is, they have no stiffness, and any pain that occurs can reasonably be attributed to use of joints affected by secondary degenerative changes. They have no evidence of joint inflammation, but may have a raised erythrocyte sedimentation rate. They have little or no need for analgesics."

Freedman³

"One hundred and twenty-five private patients have been carefully followed clinically and haematologically while receiving well over 200 patient-years of chloroquine [Aralen] therapy. The results are considered good in 70%, one-half of these cases being in remission. Improved work performance, sedimentation rate, and hemoglobin levels paralleled the major objective gain in this 70%. 90% of them remained on chloroquine [Aralen] therapy, half for more than two years. Classical peripheral rheumatoid arthritis, spondylitis, arthritis of juvenile onset, and rheumatoid disease with psoriasis, all appeared to respond about equally well.

"It is suggested that chloroquine comes closer to the ideal for long-term, safe, control of rheumatoid disease than any other agent now available."

Bagnall⁴

"Out of the 36 rheumatoid arthritis cases we treated . . . favorable results were obtained in 32 cases."

Bruckner et al.⁵

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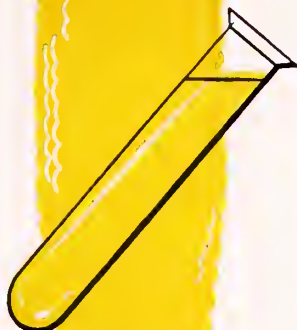
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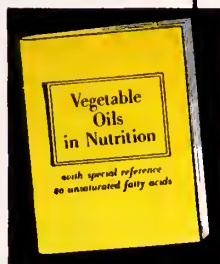
Fat	Saturated		Oleic		Linoleic		Linolenic		Arachidonic	Iodine Value	
	Ave.	Range	Ave.	Range	Ave.	Range	Ave.	Range		Average	Range
Butter	—	46-48	—	—	4.0	—	1.2	—	0.2	—	26-42
Coconut oil	—	75-88	—	5-8	—	1.0-2.5	—	—	—	—	7-10
Corn oil	13	11-15	—	23-40	56	46-66	—	0.0-0.6	—	126	113-131
Cottonseed oil	26	21-30	27	22-36	47	34-57	—	—	—	105	90-117
Lard	43	—	46	—	10	15.6	0.5	—	0.5 (2.1)	—	53-77
Linseed oil	—	6-12	—	13-31	—	10-27	—	30-64	—	—	170-204
Margarine	23	15-23	62	59-77	5.8	5-11	—	0.1-0.9	0	81	74-85
Olive oil	—	8-16	—	53-86	—	4-20	—	—	—	—	80-88
Peanut oil	17	14-22	54	44-65	29	20-37	—	—	—	98	90-102
Shortening	25	17-45	62	43-79	5	3-12	—	0.2-0.6	0-0.5	78	59-80
Soybean oil	15	11-18	25	18-58	55	28-62	5.1	0.3-10	—	130	100-143
Tallow (beef)	53	—	42	—	4	5.3	0.5	—	0.5	—	40-48

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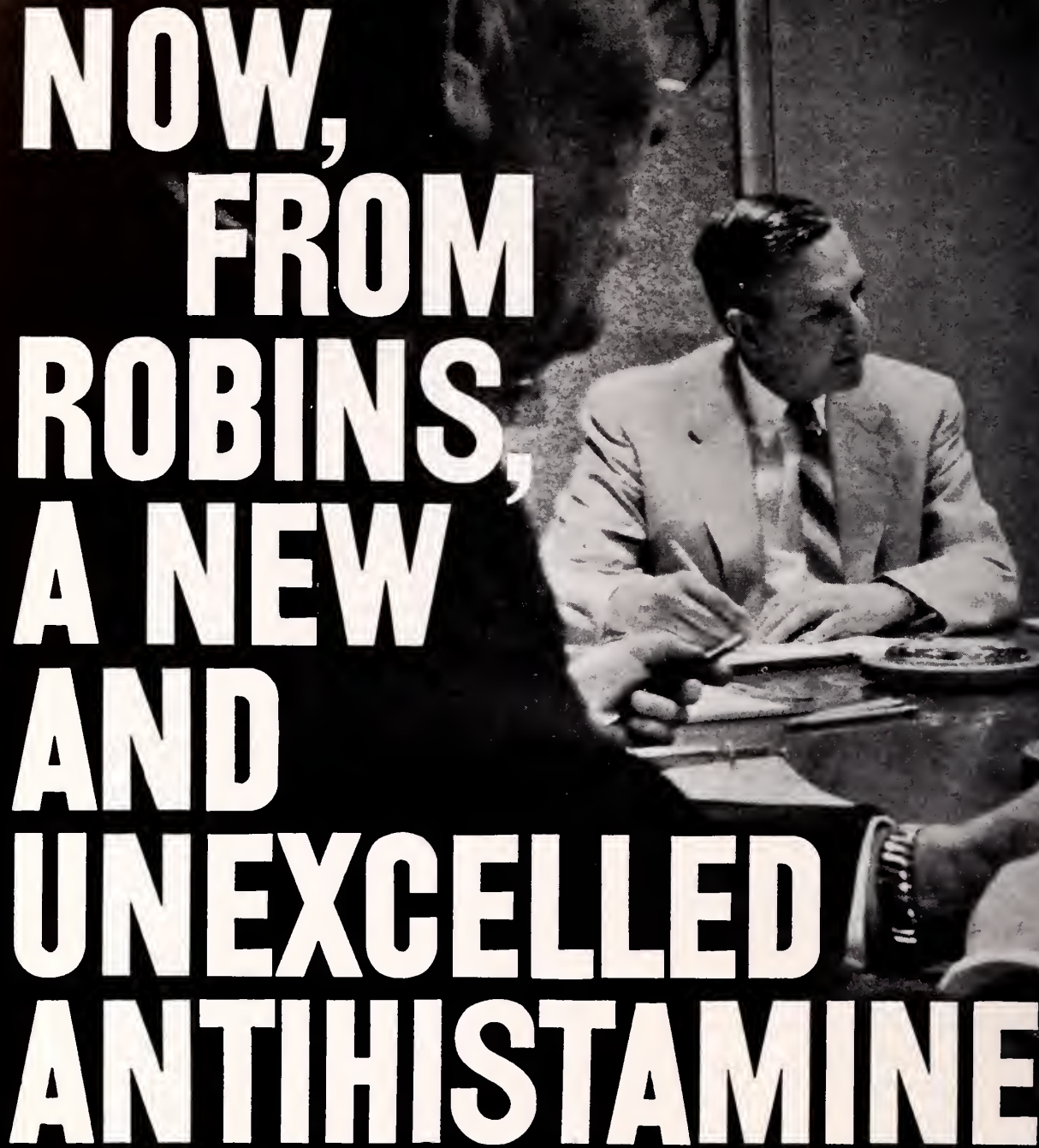
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		Excellent	Good	Fair	Negative	
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Urticaria and angioneurotic edema	3	1	1	1		Dizzy (1)
Allergic dermatitis	2		1	1		Slight Drowsiness (2)
Bronchial asthma	1		1			
Pruritus	1		1			
Total	37	15	13	7	2	Drowsiness (5) 16.2% Dizzy (1)

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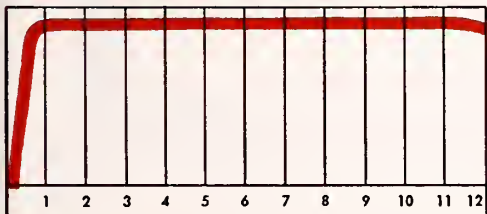
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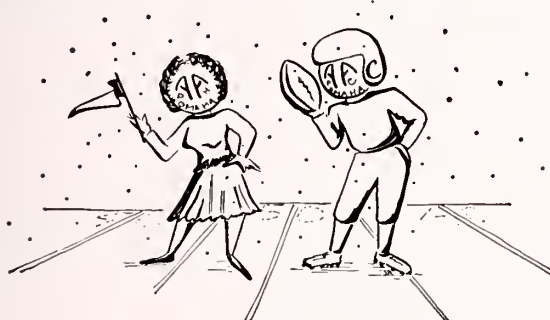
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CARTRAX should be taken *before* meals, on a *continuous* dosage schedule. Use with caution in glaucoma.

1. Russek, H. I.: J. Am. Geriat. Soc. 4:877 (Sept.) 1956.

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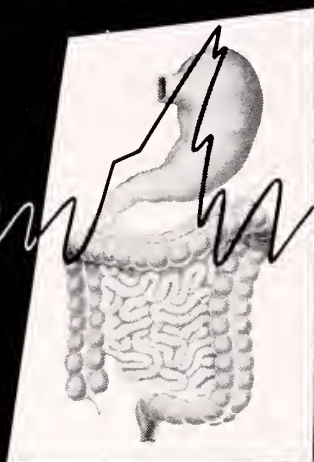
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SEARLE

PERTINENT PARAGRAPHS

An annual award of \$1,000, carrying prizes of \$500, \$300 and \$200, is offered by the American Urological Association for essays on the results of some clinical or laboratory research in urology. Competition is limited to urologists who have been graduated not more than 10 years and to hospital internes and residents doing research work in urology. Essays must be in the hands of the executive secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Md., before December 1, 1957. Additional information may be obtained from Mr. Didusch.

A national conference on "How to Use Local Television and Radio in the Health Field" has been announced for November 7-8 at Chicago's Hotel Sheraton-Blackstone. The American Medical Association and the National Association of Radio and Television Broadcasts are joint sponsors. Invited to the two-day meeting are representatives of medical societies, radio and television stations, voluntary health organizations, medical schools and allied groups.

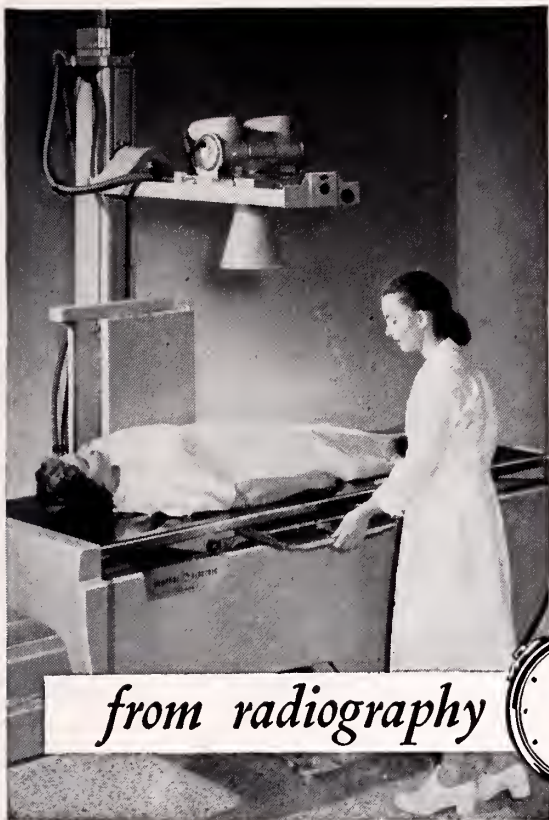
A 44-page illustrated booklet describing "AMA In Action" has been released and is available in limited quantities to state and county medical societies. The booklet points out AMA's services for physician-members and the public, and lists benefits to both the medical profession and the general public.

Federations of world-renowned surgeons have been formed on a continental basis, under auspices of the International College of Surgeons, it has been announced by Max Thorek, M.D., Chicago, founder of the College. Four units have been established, covering North America, Central and South America, Europe and Asia. Curtice Rosser, Dallas, president of the United States Section and professor and head of the department of proctology, Southwestern Medical College, will be the regional secretary of the North American Federation, consisting of the United States and Canada.

"Peripheral Vascular Disease," a new film made by the Medical Film Guild, Ltd., of New York, is now available for showing before medical groups. In color and with sound, the film was produced under a grant for postgraduate visual education from the Arlington-Funk Laboratories. For further information, contact the KSMA Headquarters Office, 1169 Eastern Parkway.

A grant of \$30,000 from the U. S. Office of Vocational Rehabilitation to support a \$50,000 research study on the economics of rehabilitation centers has been announced by Dean W. Roberts, M.D., executive director of the National Society for Crippled Children and Adults, Chicago. The society will contribute approximately \$21,000 toward the cost of the survey.

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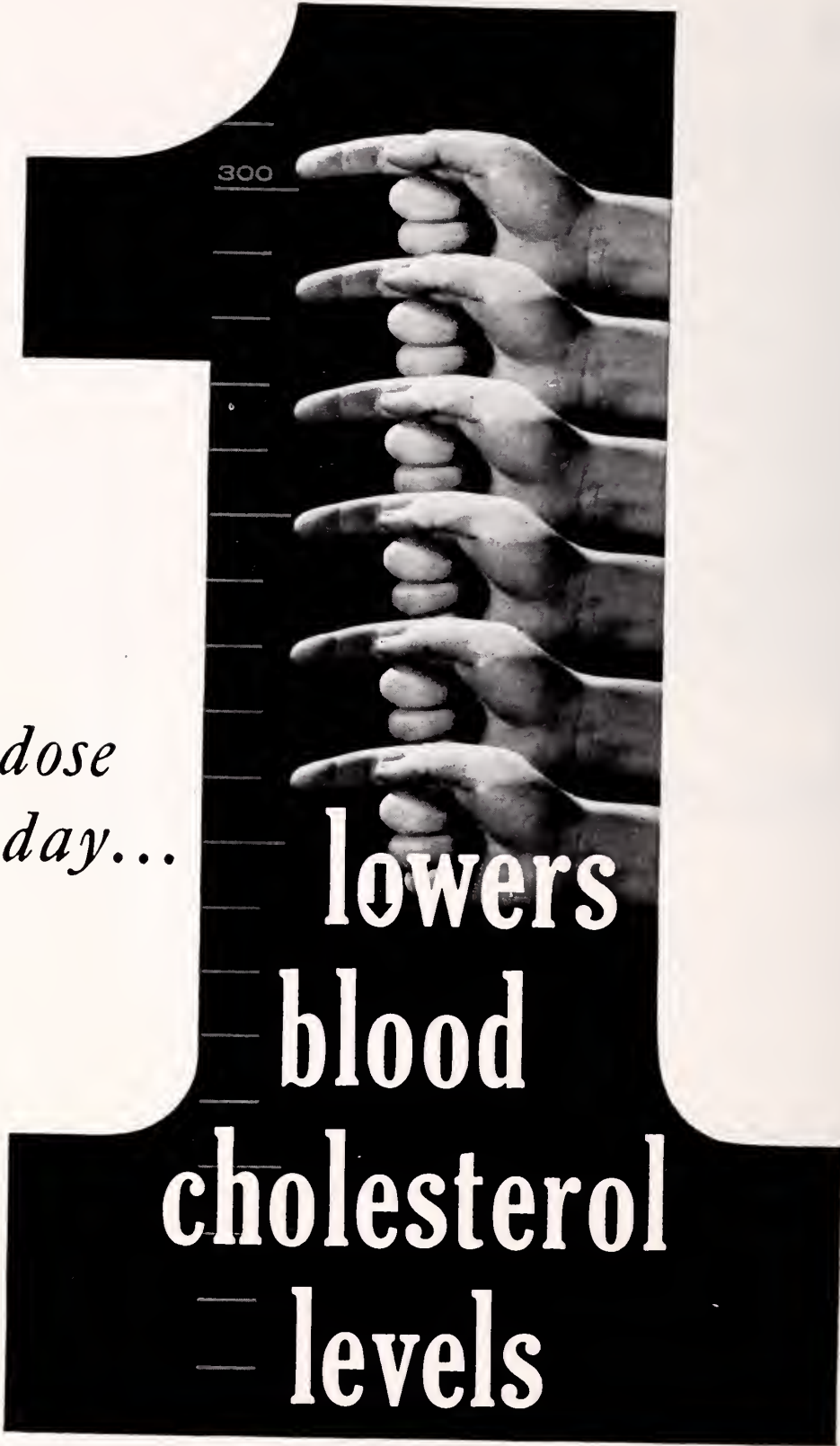
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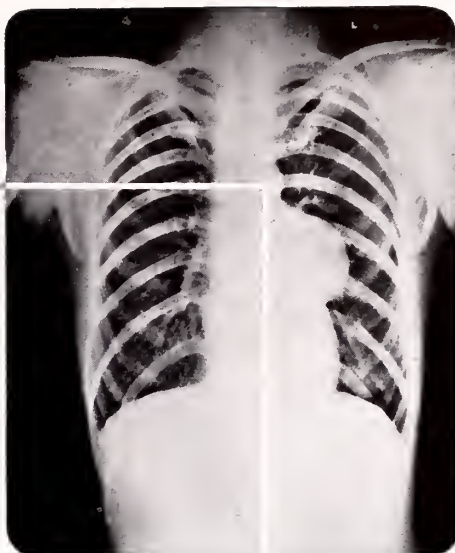
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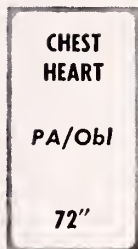
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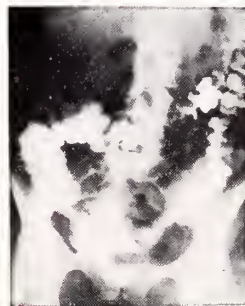
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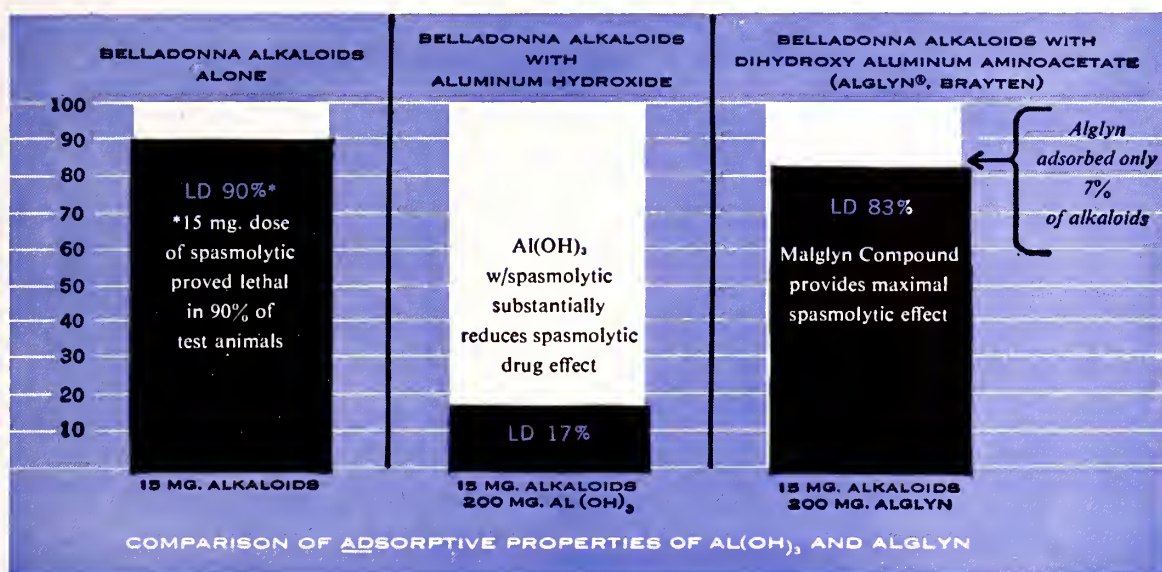
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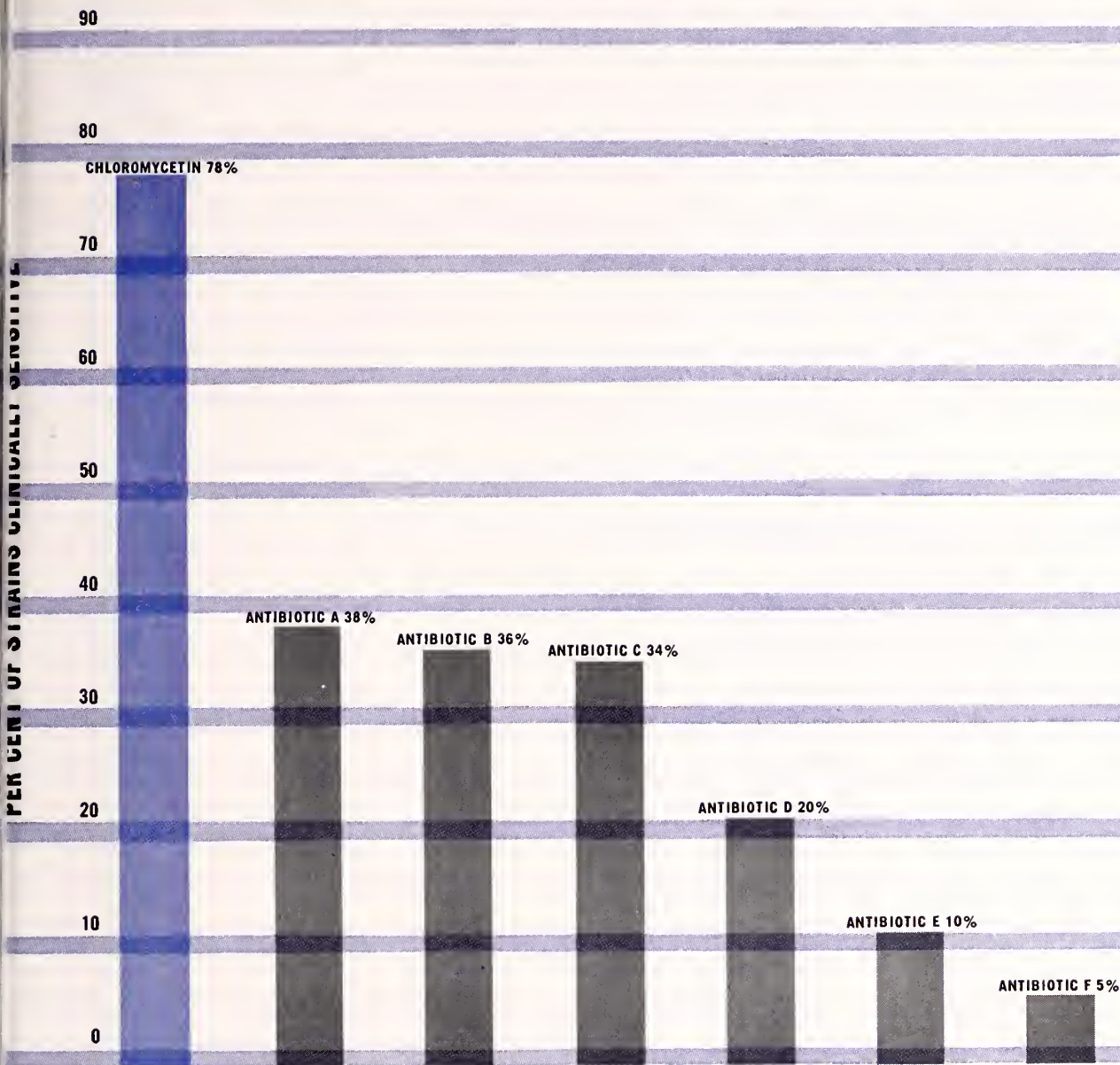
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*This graph is adapted from Waisbren and Strelitzer.¹⁵ It represents *in vitro* data obtained with clinical material isolated between the years 1951 and 1956. Inhibitory concentrations, ranging from 3 to 25 mcg. per ml., were selected on the basis of usual clinical sensitivity.

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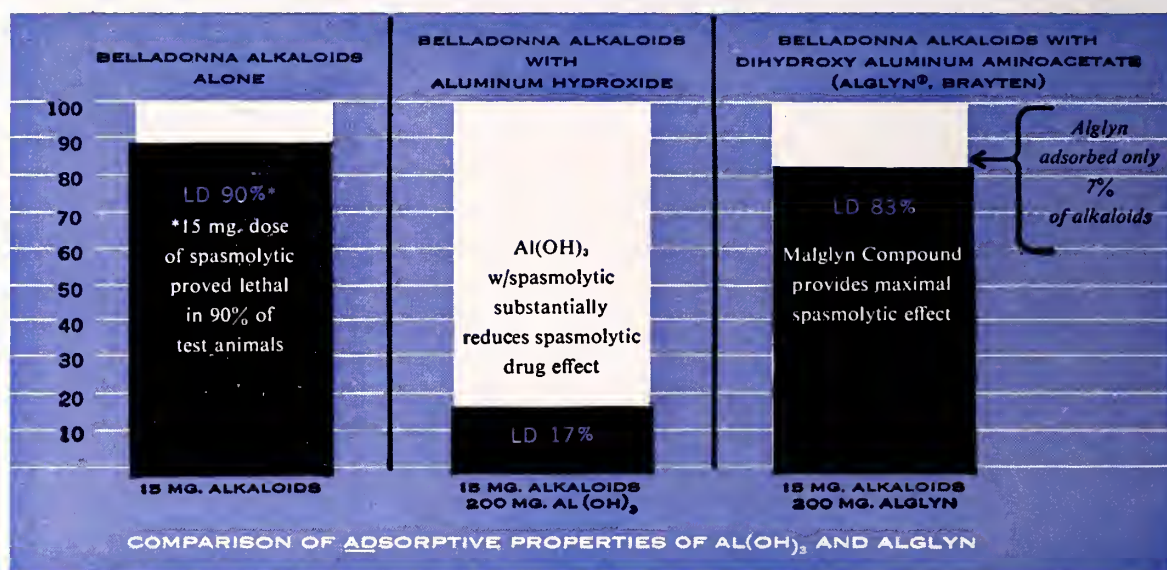
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**message
from
the
President**

The practice of medicine in the last decade has changed rapidly. In the past, the doctor was primarily concerned with trying to help his patient. He was busily engaged in the care of the sick, and continually tried to improve his knowledge, so that he would be a better doctor. The doctor had little time, and cared less, for politics.

In addition to the practice of medicine, the physician today has to cope with politics, "creeping socialism," welfare plans, corporate practice, labor unions, and a multitude of lay organizations thrusting themselves into medicine. The physician must be ever on the alert to stop these insidious advances of the liberals, the left wingers, the social planners in government, the internationalists working through the United Nations and International Labor Organizations, and a host of other groups who would change the best system of medicine in the world—the practice of medicine in these United States of America.

The physician today must be alert. He must take time to study the vast amount of health legislation. He must be on the defense at all times, and he should start now to get on the offense.

The medical societies should initiate legislation in which we believe, and fight for its passage, both on a state and national level. The American people—the healthiest in the world—have respect for the American doctor. He must maintain this respect, and convince the people that he is working for their betterment.

The individual doctor and his patients are the 'wheel hub' in American Medicine, the county societies the 'spokes' and the state and national societies the 'rim' of the wheel, ever rolling on to better health for the American people.

The county society must be active, and its elected officers able and willing to work for the betterment of Medicine.

Now is the time to elect your officers. Elect interested and capable leaders who will fight for the principles in which you believe.

E. B. Wersch M.D.

when anxiety and tension "erupts" in the G. I. tract...

IN GASTRIC ULCER



PATHIBAMATE*

Meprobamate with PATHILON® Lederle

Combines Meprobamate (400 mg.) the most widely prescribed tranquilizer . . . helps control the "emotional overlay" of gastric ulcer — without fear of barbiturate loginess, hangover or habituation . . . *with PATHILON (25 mg.)* the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.

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Supplied: Bottles of 100, 1,000.



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each coated tablet contains: **Phenaphen**

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IN THE BOOKS



THE TREATMENT OF BURNS: by Curtis P. Artz, M. D., and Eric Reiss, M. D.; Published by W. B. Saunders Company, Philadelphia and London; April 30, 1957; 250 pages; illustrated; price, \$7.50.

This fine book is written by two investigators who have had close association with a wealth of clinical burn material in the Brooke Army Medical Center Burn Research Unit.

During my tour in the Army as a Surgeon, I had several contacts with men who had worked with Curtis Artz who was then a Major in charge of the burn unit of the Army Medical Research Unit. All of these men were, without exception, strongly impressed with the man's ability and his extreme thoroughness in dealing with patients.

The book is written to cover the entire gamut of burn treatment and is inclusive enough to aid the physician who does not regularly care for burned patients. The authors cover the conventional methods of estimation of depth and percentage of area burned and show the employment of various formulae for fluid therapy, all based on Evan's formula.

Careful discussions of all phases of care range from the technique of administering fluid and keeping of composite records at bedside to the psychology involved in handling the patients.

Initial local care is covered and the background and handling of the occlusive dressing technique as opposed to the exposure method is carefully discussed. Techniques of debridement and grafting with descriptions and illustrations of many of the dermatones in American use today are given. Homograft applications in burns is covered.

An excellent section on burns of respiratory tree, face, eyelids, and ears with description of techniques of tracheotomy and plastic repair of burns of these organs is included. The problems of infection and metabolic response and nutrition are ably dealt with.

A chapter is devoted to special types of burns such as: electrical and those due to acids, lye, phosphorus, magnesium, or even vesicant gases.

The authors are concise and direct in their discussions and yet have shown enough physiological and historical background to make this book interesting, informative, and an excellent guide for the student, the resident surgeon, and an excellent reference book for the physician called upon to occasionally treat burns.

BOURBON E. CANFIELD, M. D.

A MANUAL OF PHARMACOLOGY and Its Applications to Therapeutics and Toxicology: by Torald Sollman, M. D., Eighth Edition, Published May 31, 1957 by W. B. Saunders Company, Philadelphia and London; 1535 pages; Price, \$20.

This great textbook of pharmacology familiar to 40 classes of medical students is now in its 8th edition. The plan and format of the book have not been

changed but the substance of the book shows the customary meticulous and balanced revision. Books on drugs have always resembled encyclopedias of therapeutics, physiology and chemistry or botany owing to the great variety of useful drugs and to the difficulty of developing a truly theoretical description of the subject.

As in earlier editions the material on each subject is divided into one part which "all students should aim to know" and another part, in small type, for reference. Some idea of the prodigious task of compiling the book is gained from the fact that the bibliography which contains no papers published before 1940 includes 155 pages of references.

All the drugs and poisons, new and old, rare and common, are here from senecio alkaloids, in small type, ("*Senecio latifolius* which causes cattle poisoning in western Texas contains longiglobine and related alkaloids which produce liver damage predominantly central necrosis") to Prednisolone ("moderate doses do not produce Na and water retention or K loss") and chlorpromazine, reserpine, penicillin V, the anti-diabetic sulfonamides and all the others.

The book has two aspects: its balanced and lucid exposition for the student and its incredible thoroughness as a work of reference for the physician and research worker. As a work of reference it does more than serve as a guide to the literature for in many instances quite specific details such as numerical data can be found but the organization of the material leads the student through the subject without distraction.

WILLIAM CANTRELL, M.D.

DERMATOLOGIC FORMULARY: by Frances Pascher, M. D., Second Edition, published 1957, by Paul B. Hoeber, Inc., of Harper and Brothers; 172 pages.

As stated in its preface, "one of our main purposes in publishing this Formulary is to serve the practitioner by listing the most tried and useful dermatologic prescriptions, together with the briefest and simplest explanations of their uses, indications, and contraindications."

This is exactly what the second edition of the "Dermatologic Formulary" (of the New York Skin and Cancer Unit of New York University—Bellevue Medical Center) accomplishes. With Frances Pascher, M. D., as editor and a working committee of outstanding dermatologists and a pharmacist, these preparations are truly the end result of a composite type of knowledge and experience.

The Formulary was actually designed for use in a large outpatient teaching clinic, but its contents are invaluable to the private practitioner who, perforce, should have more than a passing interest in dermatology.

(Continued on page 1048)

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3 to 1 it'll be a **Chest Film***...

You might suppose a good chest film would be easy to take. Yet this "simple" examination is often very troublesome. The trick is to get consistent *uniformity* so films of a given patient taken at long intervals will always be dependably comparable in density and contrast. If you're an expert technician, you juggle kilovoltage, time, milliamperage and focal spot to suit each patient. If you're not, you guess... *wrong*, too often.

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1 dial the bodypart
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 to the measured thickness
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3 take it!
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in the congestive phase of cardiac disease

Meat fits well into the moderate-protein, restricted-sodium, acid-ash diet currently recommended for many patients with congestive cardiac failure.¹

The protein of meat—in the proportionate arrangement of its essential amino acids—closely approaches the quantitative proportions needed to promote human tissue synthesis and repair. For this reason lean meat proves important in maintaining positive nitrogen balance without excessive protein intake.

The sodium content of meat prepared without added salt is relatively low. Per 100 grams, beef muscle meat shows approximately 50 mg. of sodium, lamb 90 mg., pork 60 mg., and veal 50 mg.²

The acid ash of meat aids in the promotion of diuresis.

The easy digestibility of meat is a prime requisite of foods specified for the patient with congestive cardiac disease.

In addition to these important features, meat contributes other nutritional factors essential in any convalescence—the B vitamins thiamine, riboflavin, niacin, pantothenic acid, B₆, and B₁₂, and the minerals iron, phosphorus, potassium, and magnesium.

1. Odell, W. M.: Nutrition in Cardiovascular Disease, in Wohl, M. C., and Goodhart, R. S.: Modern Nutrition in Health and Disease, Philadelphia, Lea & Febiger, 1955, p. 699.

2. Bills, C. E.; McDonald, F. G.; Niedermeier, W., and Schwartz, M. C.: Sodium and Potassium in Foods and Waters, J. Am. Dietet. A. 25:304 (Apr.) 1949.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

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Main Office, Chicago...Members Throughout the United States

Feeding Newborns

Successful infant feeding depends on effective planning of the newborn's nutritional regimen. The first feeding, 12 hours after birth, may consist of a prelacteal solution of KARO® Syrup. This should be offered in one or two ounce amounts at two hour intervals for 24 to 48 hours to fulfill the high water requirement during the first week of life. Breast feeding may be initiated on the second day for five minute intervals to obtain colostrum and stimulate breast secretion. However, the prelacteal feeding is continued thereafter and between nursings.

Artificial feeding is offered on the second day if breast feeding is denied. Small infants are fed at three hour intervals and large infants at four hour intervals. The initial formula usually is a low caloric milk mixture to enable gradual adaptation of the feeding to the infant's tolerance. Concentration of the formula is grad-

ually increased at intervals of several days, in the absence of digestive disturbances. The infant should be fed in a semi-reclining position, burped during and after feeding, and kept on his right side or abdomen undisturbed for an hour.

The same problems of infant feeding recur from generation to generation, but solutions may differ with each era. The carbohydrate requirement for all infants is as completely fulfilled by KARO Syrup today as a generation ago. Whatever the type of milk adapted to the individual infant, KARO Syrup may be added confidently because it is a balanced mixture of low molecular weight sugars, readily miscible, well tolerated, palliative, hypoallergenic, resistant to fermentation in the intestine, easily digestible, readily absorbed and non-laxative. It is readily available in all food stores.

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FORMULA III 16 cal./oz. Whole milk 10 oz. Water 10 oz. Karo 1 oz. 3 1/2 oz. x 6 q 4h.	*Whole lactic acid milk formulas may also be prepared from whole cow's milk.
FORMULA III 20 cal./oz. Evap. milk 6 oz. Water 12 oz. Karo 1 oz. 3 oz. x 6 q 4h.	**Whole lactic acid milk formulas may also be prepared from evaporated cow's milk.
FORMULA III 18 cal./oz. Dried milk 6 tbsp. Water 20 oz. Karo 1 oz. 3 1/2 oz. x 6 q 4h.	


Adapted from Nelson's Pediatrics,
Saunders, Phila. 1954

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Diagnosis	No. of Patients	Response				Side Effects
		Excellent	Good	Fair	Negative	
Allergic rhinitis and vasomotor rhinitis	30	14	9	5	2	Slight Drowsiness (3)
Urticaria and angioneurotic edema	3	1	1	1		Dizzy (1)
Allergic dermatitis	2		1	1		Slight Drowsiness (2)
Bronchial asthma	1		1			
Pruritus	1		1			
Total	37	15	13	7	2	Drowsiness (5) 16.2% Dizzy (1)

From the preliminary Dimetane Extentabs studies of three investigators. Further clinical investigations will be reported as completed.



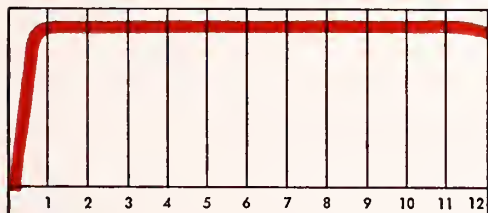
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Elixir, three or four times daily.
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or one teaspoonful Elixir t.i.d.,*

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Propylparaben	

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ACHROCIDIN*

TETRACYCLINE-ANTIHISTAMINE-ANALGESIC COMPOUND

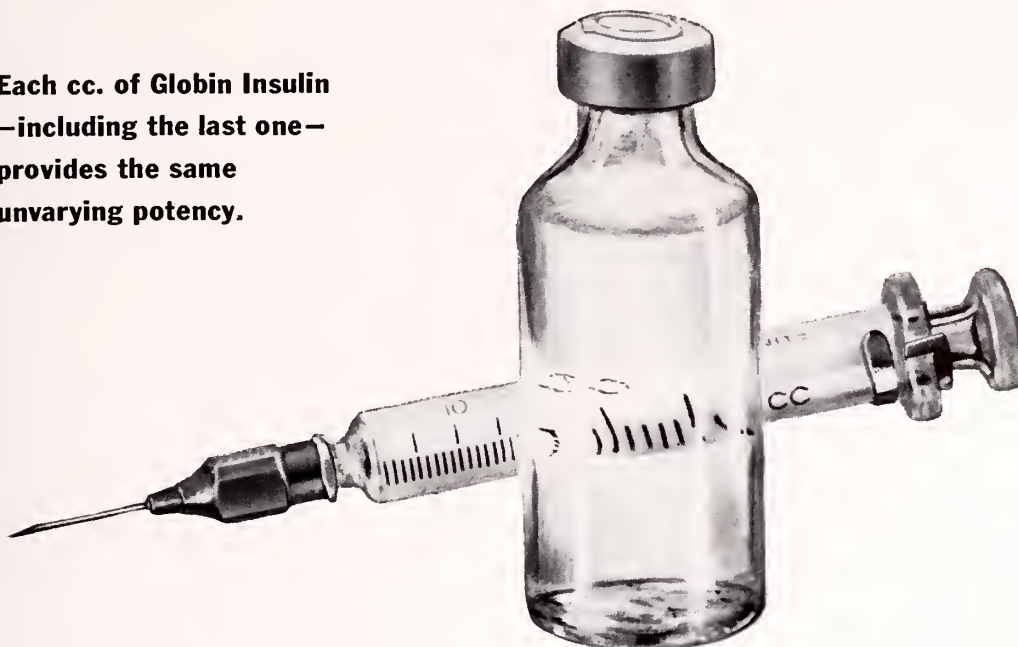
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when anxiety and tension "erupts" in the G. I. tract...

IN DUODENAL ULCER



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Combines Meprobamate (400 mg.) the most widely prescribed tranquilizer . . . helps control the "emotional overlay" of duodenal ulcer — without fear of barbiturate loginess, hangover or habituation . . . *with PATHILON (25 mg.)* the anticholinergic noted for its extremely low toxicity and high effectiveness in the treatment of many G.I. disorders.

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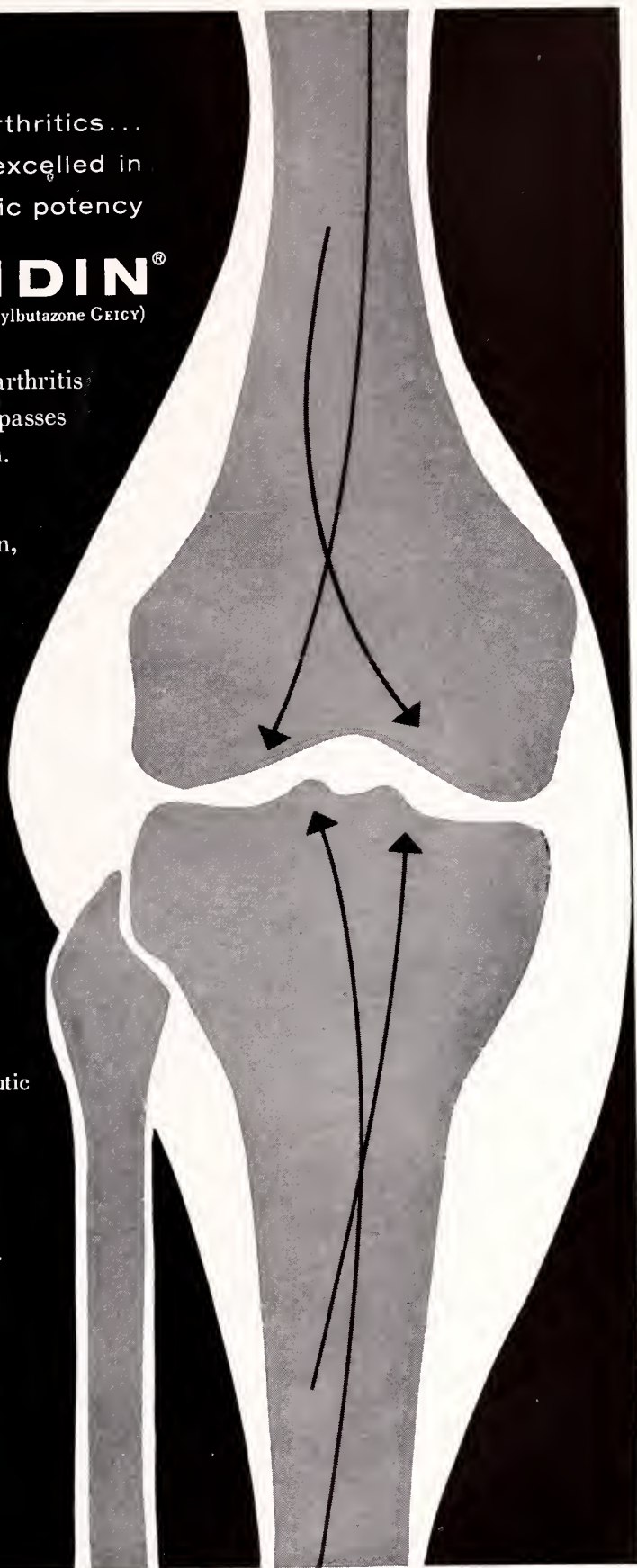
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Monilial
overgrowth
is a factor

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Combines ACHROMYCIN V with NYSTATIN

ACHROSTATIN V combines ACHROMYCIN† V...
the new rapid-acting oral form of
ACHROMYCIN† Tetracycline... noted for its
outstanding effectiveness against more than
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antifungal specific. ACHROSTATIN V provides
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of antibiotic treatment.

supplied:

ACHROSTATIN V CAPSULES
contain 250 mg. tetracycline
HCl equivalent (phosphate-
buffered) and 250,000
units Nystatin.

dosage:

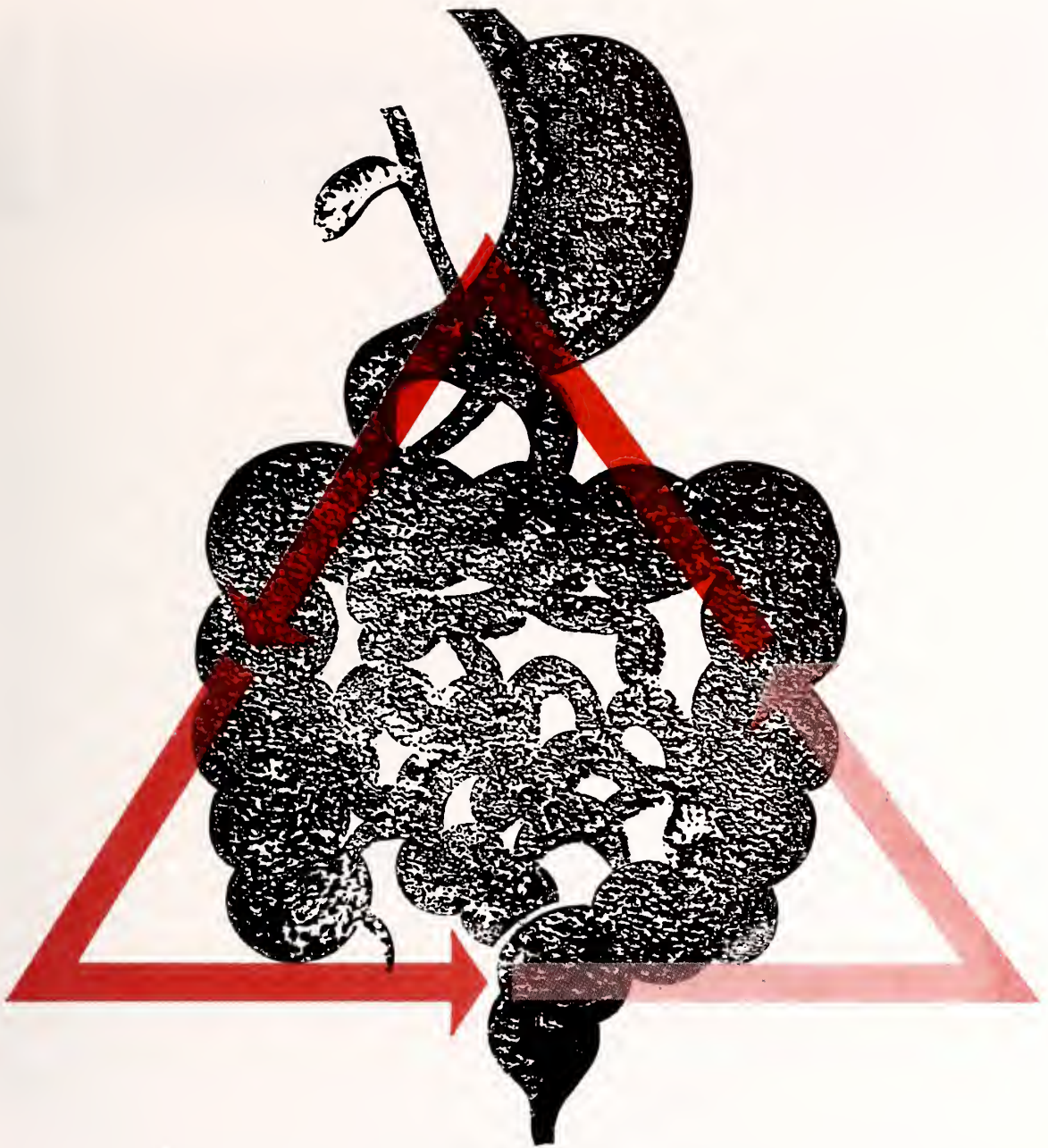
Basic oral dosage (6-7 mg.
per lb. body weight per day)
in the average adult is
4 capsules of ACHROSTATIN V
per day, equivalent to
1 Gm. of ACHROMYCIN V.

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**rapid, prolonged relief throughout the G.I. tract
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PUBLIC HEALTH PAGE



PREMATURITY

RUSSELL E. TEAGUE, M.D.
COMMISSIONER OF HEALTH
State of Kentucky

A premature is defined as an infant weighing less than $5\frac{1}{2}$ pounds or 2500 grams at birth* regardless of gestation. Wherever birth weight is not available thirty-seven weeks is accepted as the line of demarcation for premature birth. However, since information concerning length of gestation is notably inaccurate and since studies have shown that correlation between gestation and birth weight is not constant, the birth weight of less than 2500 grams is the preferred criterion.

The incidence of premature births in the United States is about 7% of total live births, (based on 1950 figures). This includes both white and colored births. In Kentucky in 1956 there were 5,581 premature births, constituting 7.6% of the total live births. Of these, 848 infants failed to survive. This is a mortality rate of 130 per 1,000 live births for the premature infant as compared with a mortality rate of 28.8 per 1,000 live births for all born infants.

The prognosis for these infants is directly related, of course, to their weight at birth. The following table shows expected survival rates for premature infants by weight groupings. This table represents a composite of reported experiences from various hospitals, as obtained from "Premature Infants," by Ethel C. Dunham, M.D.

TABLE 1. RANGE IN REPORTED SURVIVAL RATES

WGHT	SURVIVAL (%)
1000 gm or less	0 - 21
1001 - 1500	36 - 68
1501 - 2000	77 - 90
2001 - 2500	89 - 96

From this it will be apparent that for the two higher weight groups the prognosis is good, for the group weighing 1001-1500 gm. the prognosis is fair, and for those weighing less than 1000 gm. the prognosis is poor. While individual hospitals have reported improvement in survival rates for all premature infants in the neonatal period in recent years there is a lack of data on the national level to support this contention. This is due to the fact that most states did not include the birth weight item on their birth certificate until quite recently. For this reason mortality rates due to prematurity could not be calculated except for those cases which stated prematurity to be the cause of death and rates could not be calculated on a weight basis as in Table 1. Hospitals reporting improvement have been, in the main, confined to

the larger, teaching institutions where facilities and personnel are apt to be more adequate.

The causes of prematurity are not fully known or understood. The commonest cause is multiple births. Prematurity is also more apt to occur in the primi-gravida. These causes, of course, cannot be prevented but they can be anticipated. Studies have shown, furthermore, that prematurity is more apt to be associated with complications of pregnancy in the mother, particularly toxemia, or with any chronic or acute disease in the mother. The now famous work of Stuart, Burke et al, working at Harvard, has implicated poor nutrition as one of the causative factors. Prevention of prematurity then needs to be directed at improvement of prenatal care and nutritional status for all expectant mothers with particular efforts at prolonging gestation in those who are known to possess one of the complications which predisposes to premature labor.

Follow-up studies on children who have survived premature birth indicate that the prognosis for these infants is sufficiently good to justify our attempts to help them survive. While most of them experience some delay in growth, inversely proportional to their birth weight, most of them will overcome this delay within the first four or five years of life. Mental deficiency, contrary to previous impression, is no higher in this group than in the general population. Congenital malformations, although admittedly more common in the premature infant are not usually severe in those who survive and are amenable to the same corrective procedures as in other children. Now that the cause and prevention of the dreaded retro-lental fibroplasia is understood there is no longer any reason for it to occur except in rare instances.

Needed steps in the further reduction of deaths due to prematurity may be summarized as follows:

(1) Further efforts to prevent the occurrence of premature birth through improvement of nutrition and prenatal case.

(2) Improvement of available data concerning premature births and deaths. This includes such things as recording of birth weight on birth certificates and attempting to ascertain causes of death over and above prematurity and recording these on the death certificates, since even though the infant may be premature, death is usually caused by some super-imposed condition, eg., atelectasis. Determining and recording what these conditions are would help us

(Continued on page 1049)

*World Health Organization, 1948

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8 STUDENTS ON FLIGHTS TO U.S. HAVE ASIAN FLU

New York, Aug. 15 (AP) Laboratory tests on eight foreign exchange student arrivals Aug. 8 show they are victims of Asiatic flu, the health department reports today. The eight arrived on a plane from Europe.

Twenty-nine other students suffering from influenza arrived Tuesday from Rotterdam on the ship Arosa Sky. One, Nicholas Memmos, a Greek exchange student, died yesterday. Six of these students were released today; the others are to be released tomorrow. It has not yet been determined whether any died from Asiatic influenza.

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There's cause for concern about Asiatic flu, but scientists and public health officials see no reason for anyone to panic.

First shipments of the vaccine against the new influenza strain have arrived in Chicago, setting off a flood of telephone calls from worried patients to doctors, and from doctors to drug suppliers. This is a normal pattern of mass fear and is understandable.

Even though Salk vaccine priorities were necessary, the regulation produced administrative headaches, public complaints and probably a gray, if not a black market. When regulation is invoked, it would be

PUBLIC HEALTH

Influenza M

► INFLUENZA, one of the most unpredictable of communicable diseases, is racing "on cat feet" across the nation right now. It has already struck once this year in mild epidemic form at an Air Force base in Colorado. When and how severe it will strike again is a perennial riddle for public health authorities.

It will probably not lie dormant for the rest of the winter months. At the least there will be sporadic outbreaks throughout the country. If conditions occur, it could spread

The War on Mutant A

If Florence was in the grip of an epidemic of colds, coughs and fevers, astrologers . . . declared that it was caused by the influence of an unusual conjunction of planets. This sickness has been known as "influenza"—Chronicles of 1200-1470.

To combat new resistance," a worldwide epidemic is week in response from the Far East. Since the World Health Organization, which collects information around the globe, specimens of the epidemic. In more than a century, including those of the

Asian Flu: the Outlook

Asian influenza will hit the U.S. this fall before mass immunization can be effective, and the nation faces an epidemic which may strike 15 million to 30 million people. The disease is relatively mild (in no way comparable to the killing "Spanish flu" of 1918-19), and is likely to cause only a small number of deaths among the feeble young and the feebled old. But it may compel 10% to 20% of the population in affected areas to take

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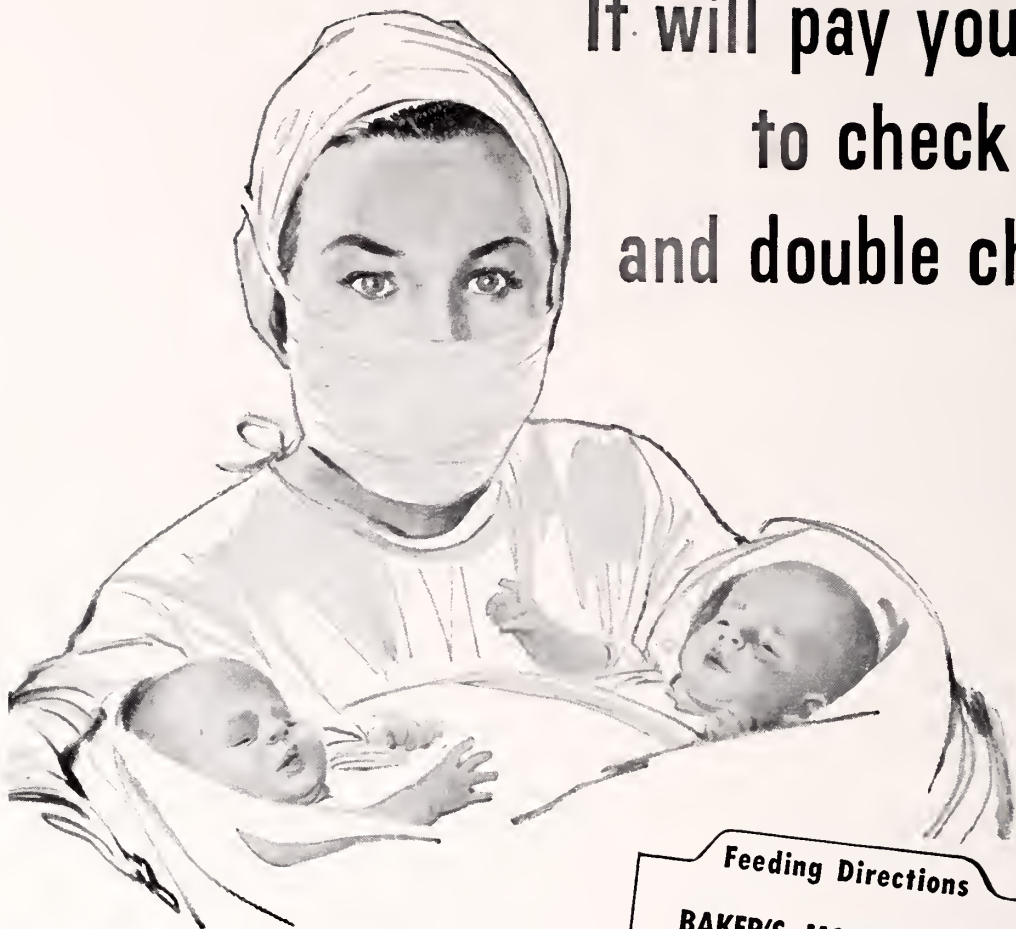
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WASHINGTON NEWS DIGEST



Washington, D.C.—Several months in advance of the return of the 85th Congress for its election-year second session, influential figures in the field of health in both the executive branch and in Congress were being heard on what 1958 has in store for the medical profession.

Because of the roles they play in the Capital, their views are worth more than passing notice. One is the chairman of the important health appropriations subcommittee of the House, Rep. John Fogarty (D., R. I.). He used as a forum for his prophecies the annual convention of the American Hospital Association.

Other prognostications came from Dr. Aims C. McGuinness, special assistant for health and medical affairs to Secretary Folsom of the Department of Health, Education, and Welfare. Dr. McGuinness spoke out at a dedication ceremony of a new chronic disease and rehabilitation facility in Maine.

Mr. Fogarty places at the top of his predictions some action on federal construction aid to medical schools. The Rhode Island Democrat has his own bill on the subject, although there are others pending. Comments Mr. Fogarty: "...the shortage of health education facilities today is probably the most serious bottleneck in our whole medical system... These schools... fall far short of accommodating the fully qualified and competent young men and women in America who are anxious to train and qualify in medical, dental and public health fields."

The record of the past several years has shown that no member of the House is listened to more carefully when it comes to health than Mr. Fogarty. His philosophy in the health field is worth noting: "It is now generally accepted that the health of our people is a major national resource and that the government, therefore, has a direct responsibility for the health of everyone."

Dr. McGuinness also spoke out strongly for federal aid to medical schools. Failure to meet the needs of the schools, he told his audience, would be "the worst kind of economy." He feels that the administration proposal for \$225 million in construction grants would bring classrooms and research laboratories "much closer to current and projected needs."

While neither man had any specific legislative proposals to make in the field, both foresee a growing role for hospitals in the practice of medicine. Dr. McGuinness put it this way: "General hospitals must broaden their services and achieve greater coordination. The term 'hospital care' should include not only

bed care but diagnostic service as well as service to ambulatory patients."

Mr. Fogarty, looking ahead 25 years, said it was safe to predict that virtually every general hospital in the Nation will be providing at least as much preventive service as curative service. "You are, in fact, moving closer each moment to the day when hospitals will be the focal point of health services for all of us, throughout our entire lives."

The same day that Mr. Fogarty was urging the hospitals to use the basic Hill-Burton hospital construction program to meet future health needs, the AHA House of Delegates approved a set of legislative proposals to present to the next session.

They would accomplish the following: (1) extend the act for five years beyond June, 1959, (2) authorize matching Hill-Burton funds for renovation and repairs of hospital plants, (3) set up loan authority so that hospitals not desiring grant money could borrow construction and renovation funds at very low interest rates (from 1 1/2 to 2%). The house also urged a grants program to hospitals with nursing schools and to other nurse institutions for professional education, exclusive of construction grants.

NOTES:

One committee of Congress knows months in advance just exactly what it plans to do the day Congress reconvenes. The tax-writing House Ways and Means Committee has set hearings starting January 7 on possible tax reductions next year.

Included on the agenda will be testimony from various organizations on the Jenkins-Keogh bills for allowing tax deferments for money paid into retirement plans. The American Thrift Assembly, which is backed by the American Medical Association and other professional and business groups, plans to be heard at some time during the 30 days of hearings.

Veterans Administrator Harvey Higley believes that the public is losing interest in the veteran and his problems, and that some doctors no longer hesitate to attack medical care for veterans, particularly those with non-service-connected disabilities. Mr. Higley spoke at the annual American Legion convention.

Health directors of 21 American republics, holding their annual Pan American Sanitary Organization meeting here this fall, voted a \$3 million budget for the Pan American Sanitary Bureau's 160-odd health projects for next year.

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Lewis, H. H.; Frumess, G. M., and Henschel, E. J.: *Rocky Mountain M. J.* 54:806 (Aug.) 1957.

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Shubin, H.: *Antibiotic Med. & Clin. Therapy* 4:174 (March) 1957.

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Report on 1404 Cases Treated with Signemycin: Medical Department,

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Levi, W. M., and Kredel, F. E.: *J. South Carolina M. A.* 53:178 (May) 1957.

Of 50 patients with various infectious processes, 26 had not responded to previous antibiotic therapy. With Signemycin "Ninety-six per cent of the mixed infections were clinically controlled. . . and in none of the cases was there any reason to discontinue the drug."

Winton, S. S., and Chesrow, E.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 55.

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LaCaille, R. A., and Prigot, A.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 67.

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Frank, L., and Stritzler, C.: *Antibiotic Med. & Clin. Therapy* 4:419 (July) 1957.

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Loughlin, E. H., and Mullin, W. G.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 63.

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1. Hodges, F. T.: GP, 14:86, Nov., 1956.

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NO. 11

PHYSIOLOGICAL MECHANISMS OF ASCITES*

GEORGE S. DOZIER, M.D.**

Lexington, Ky.

ASCITES has been encountered in many diseases. Extensive clinical observations have shown that ascites frequently occurs in diseases associated with hepatic or portal venous congestion. Laennec's cirrhosis of the liver with its familiar pathologic pattern leading to eventual portal fibrosis and marked distortion of intrahepatic vascular channels is one of these diseases. It is common opinion that the hepatic deformity impedes the circulation through the organ with resultant portal congestion and possible ascites. Without a doubt, the incidence of ascites with portal cirrhosis is one of the most frequent and characteristic findings in the disease.¹

It is also of equal importance to mention that ascites may occur when blood flow through the liver is impeded by hepatic venous obstruction when the cause is quite extraneous to the liver. Long-standing myocardial insufficiency from a variety of cardiac lesions can invoke unremitting venous engorgement which may seriously interfere with hepatic and portal blood flow.² In like manner, chronic constrictive pericarditis³ and distortion of the mediastinum with vena caval compression may similarly impede hepatic blood flow.² In such conditions, cellular atrophy, necrosis, and eventual fibrosis occur about the central veins of the liver lobules, and the walls of the central veins may become

thickened.⁴ Also, fibrosis to a lesser degree may occur in the portal spaces. This form of hepatic fibrosis has been called congestive or cardiac cirrhosis. It is clearly evident that livers afflicted with portal cirrhosis or congestive cirrhosis have in common the impendence of blood flow through the liver vasculature.⁴ In either case, portal hypertension and/or ascites may develop if vascular obstruction within the organ is critically severe.

Ascites associated with cirrhosis of the liver has been the most frequently studied by the various investigators of this problem; but, it should also be mentioned that ascites has been encountered in a number of disorders which are not associated with hepatic congestion or fibrosis. Severe hypoproteinemia, as in the nephrotic syndrome or starvation state, may provoke ascites. Less often, carcinomatosis, tuberculous peritonitis, Meig's Syndrome, and myxedema are accompanied by this condition.

It is the purpose of this paper to review briefly some of the recent data concerning the physiologic mechanism in the formation of ascites. In an effort to do this, both clinical and experimental evidence thought to influence ascites formation will be presented. It should be emphasized that the exact mechanism in the formation of ascitic fluid is not known.

Experimental Ascites

As with many forms of clinical and physiologic investigation of human disease, supplementary knowledge of value may be gained from animal experimentation performed under careful control.

Earlier investigators produced artificial ascites by introducing various solutions directly into the peritoneal cavity of the experimental animal. They were able to study the physiologic results of increased intra-abdominal pressure

*From the Medical Service, Veterans Administration Hospital, Louisville Ky., and the Department of Medicine, University of Louisville School of Medicine.

Sponsored by the Veterans Administration and published with the approval of the Chief Medical Director. The statements made and the conclusions drawn by the author are a result of his own study and do not necessarily reflect the opinion or policy of the Veterans Administration.

**Formerly, Assistant to the Chief of the Medical Service, V. A. Hospital, Louisville, Ky., and Instructor in Medicine, University of Louisville Medical School.

and to observe certain factors controlling body fluids. In general, these studies indicated that the introduction of either hypotonic or hypertonic solutions into the peritoneal space evoked fluid adjustments rendering the instilled fluid osmotically equal to the plasma before resorption occurred.

The clinical occurrence of ascites with intrinsic liver disease suggests the value of studying experimental cirrhosis. Various toxic drugs have been employed in animals to cause hepatic cellular deterioration and fibrosis in an effort to study portal hypertension.

Hepatic congestion has been the most successful method of inducing sustained experimental ascites. Numerous investigators have successfully produced ascites by provoking hepatic engorgement by a variety of methods. McKee and his associates^{5,6} have been able to produce massive ascites by reducing the lumen of the inferior vena cava in dogs by about one-half, using pliable aluminum bands placed immediately above the hepatic veins. Such animals usually develop ascites within two weeks following the operation. It usually persists for long periods of time before finally disappearing spontaneously. Transient portal hypertension may follow the vena caval constriction, and its duration appears to depend on the rapidity with which collateral portasystemic communications developed.⁷

According to McKee and his associates,⁵ when ascites has thus been established in the experimental animal, there is a rapid passage of plasma proteins into the ascitic fluid. This process has been designated "internal plasmapheresis." Hyatt⁴ points out that the term seems applicable because the loss of protein into the ascitic fluid occurs without detectable alteration in blood volume. McKee and Berman^{5,8} pointed out that the ascitic dog preparation shows little evidence of impaired hepatic function as judged by bromsulphalein clearance and the regeneration of plasma proteins. In fact, these ascitic animals usually display normal physiologic functions except for the tendency to form ascites.

At this point it appears logical to analyze the various factors which may influence ascitic fluid formation, using both clinical and experimental information.

Factors Influencing Ascites Formation

Starling's principles of fluid exchange between the blood stream and tissue spaces state

that the capillary hydrostatic pressure and colloidal osmotic force of the tissue fluid favor movement of fluid into the perivascular spaces, whereas, the colloidal osmotic force of the blood together with tissue hydrostatic pressure tends to retain fluid within the vascular system. He also stressed the importance of capillary permeability and the lymphatic drainage in the regulation of these fluid transfers. The capillary wall is relatively impermeable to plasma protein so that the osmotic force of the plasma proteins assumes considerable importance in opposing the filtration of fluid at the arterial end of the capillary and in recalling fluid from the tissue spaces at the venous end.^{9,10}

Usually, very little protein escapes from the capillary wall, and the small quantity that does is swept from the tissue spaces by the lymphatic channels which are permeable to protein molecules. Therefore, it is reasonable to assume that elevation of capillary filtration pressure from venous congestion may provoke tissue edema by overwhelming both the osmotic system of fluid removal as well as the lymphatics.⁴ Conversely, the loss of plasma proteins from the vascular stream will tend to oppose optimal removal of fluid from the extravascular spaces so that tissue edema is again favored. A more detailed analysis of these forces and others is in accord at this point.

INFLUENCE OF PORTAL HYPERTENSION: Since it has been widely understood that ascitic fluid is the result of increased fluid filtration into the peritoneal space under the force of portal hypertension caused by hepatic disease or generalized venous congestion, proof for the contention must lie in the demonstration of significant portal hypertension in cases of ascites.⁴

The portal system originates in the mesenteric capillaries and terminates in the hepatic sinusoids, and it is therefore inaccessible for routine pressure measurements. Fortunately, direct portal pressure measurements have been secured during laparotomy in a number of patients with presumably normal visceral circulation, and it has been found that the normal portal pressures range from 13.0 to 23.5 cm. of water.¹¹ Most patients with hepatic cirrhosis show moderate elevation of the portal pressure with a range from 22.0 to 35.0 cm. of water.¹² Thus, there is some overlapping of lower portal pressures found in cirrhotics and in pressures of normal individuals. It has been postulated

that the pressures within the normal range in cirrhotics may be the result of adequate porta-venous collateral circulation. According to these data, it has been found that often the actual filtration force which is applied to the capillary membrane in the portal system in cirrhotics may not be great.

It is extremely significant that many observations reveal that there may be little or no correlation between the elevation of portal pressure and the occurrence of ascites.⁴ According to Rousselot and his associate,¹³ some patients with occlusion of the portal vein without ascites may have greater elevation of portal pressure than some cirrhotics with marked ascites. They point out the important fact that some patients with cirrhosis have ascites when the portal tension is within normal limits, whereas, other cirrhotics have no ascites with marked increase in the portal venous pressure.

These facts argue against the importance of portal hypertension in the formation of ascites. However, certain experimental observations suggest that some forms of ascites may result from increased portal tension. According to Berman,⁸ Volwiler,⁷ Wiles,¹⁴ and others, if partial or complete occlusion of the portal vein is carried out in dogs, ascites will rarely occur, but if severe hypoproteinemia is induced, ascites formation is generally produced. However, the ascites is transient and the fluid contains very little protein. This is in marked contrast to the voluminous ascites formation following vena caval constriction as in the ascitic dog. This fluid is usually rich in protein, and the formation is often associated with normal portal pressure.⁷

Therefore, the present evidence suggests that portal hypertension is not the dominant factor in the production of ascites in patients with hepatic cirrhosis or in the experimental animal.⁴ But, portal hypertension may be contributory to ascites formation in cases in which a critical elevation of pressure is reached and when the plasma proteins are so reduced as to nullify the normal osmotic force.

INFLUENCE OF INTRA-ABDOMINAL PRESSURE: The accumulation of ascitic fluid may render the abdomen extremely taut, with intra-abdominal tensions varying from 15 to 60 cm. of water. If this pressure represents a tissue hydrostatic force, the question arises whether such a force opposes the entrance of

fluid into the peritoneal cavity.⁴ According to Mankin and Lowell¹⁵ and James,¹⁶ the magnitude of this force is probably actually governed by the rate of ascites formation, and it exerts only minor influence on the mechanism of ascites formation.

Davidson and associates¹⁷ state that a large collection of fluid in the abdomen leads to elevation of inferior vena caval pressure which may contribute to edema of the lower extremities which is often seen in cirrhotic patients with ascites.

INFLUENCE OF OSMOTIC PRESSURE: The colloidal osmotic pressure of the blood is exerted primarily by the plasma proteins and particularly by the albumin fraction. This force normally tends to hold fluid within the vasculature.

Ascitic fluid resulting from portal cirrhosis or hepatic congestion is essentially similar to plasma except for a lower protein content, but the protein itself is electrophoretically similar to that of plasma.^{5,18} The protein content of ascitic fluids ranges widely from 0.3 grams per cent to 4.7 grams per cent,^{18,19} but the average protein range is much greater than the protein content found in the subcutaneous edema of congestive heart failure.²⁰

According to Ricketts,²¹ most patients with cirrhosis and ascites had plasma albumin levels below 3.0 grams per cent, whereas, in cirrhotic patients without ascites the plasma albumin fractions were nearer normal. However, reports by Ralli²² and by Peters²³ suggest that in similar studies there is no constant correlation between the blood colloidal osmotic pressure and the rate and volume of ascites formation.

Gibson,²⁴ Patek,²⁵ Thorn,²⁶ and others have shown that when cirrhotic patients with ascites are given concentrated salt-poor albumin, a transient elevation of plasma albumin content occurs, but generally there is no measurable effect on the rate of ascites formation.

Since ascitic fluid contains a relatively large amount of protein, the question arises whether any appreciable colloidal osmotic force exists to retain fluid in the peritoneal cavity.⁴ Work by Kunkel²⁷ shows that following the intra-peritoneal injection of salt-poor albumin there is usually an increase in the serum albumin level with no increase in the ascitic fluid formation. In fact, his data showed that there may actually result a decrease in the quantity of the ascitic fluid.

McKee and others⁵ in experiments using the ascitic dog preparation showed that when animals were given low-salt, low protein diets, ascitic fluid formation was rapid, and when the plasma protein level was raised by increased dietary protein intake with continued salt restriction, the fluid formation was significantly retarded. But, in the same animals when the plasma protein levels were raised by intravenous infusions of dog plasma, the ascites continued to form rapidly and the fluid contained large amounts of protein. These authors were also able to correct hypoproteinemia by infusions of amino acids in saline or in distilled water, but they found that only when the protein was given in distilled water was the ascites formation effectively stopped. They reasoned that since the fluid formation was not regularly prevented by increasing the plasma proteins, the sodium content of the infused plasma or of the saline-amino acid mixture may have enhanced the output of fluid. In other words, these investigators felt that they had demonstrated that sodium retention perhaps was the main factor in this form of ascites with plasma protein being of only secondary importance.

INFLUENCE OF SODIUM AND WATER RETENTION: Thus far, there is a lack of correlation between ascites formation and alterations in portal venous pressure, plasma and ascitic fluid protein content, and tissue hydrostatic force, or any combination of these factors. But, it has become increasingly evident that the influence of sodium and water retention is of particular importance in ascites formation, once the optimal conditions of hepatic fibrosis or congestion are established.⁴

Several investigators²⁸ have demonstrated that cirrhotic patients with ascites or patients with chronic congestive heart failure excrete a markedly reduced amount of sodium in the urine. In the presence of ascites it has also been noted that this sodium retention is not associated with increased plasma sodium levels. Eisenmenger and collaborators²⁹ found that patients with cirrhosis may eliminate as little as 1 mEq of urinary sodium per day while on a normal sodium intake. Other similar patients subjected to sodium restriction and high protein diets showed a gradual increase of urinary sodium excretion and urine volume together with a rise of plasma sodium and decrease of ascites over long periods. Experimentation with

ascitic dogs revealed reduced urinary sodium excretion, and McKee⁵ found that marked dietary sodium restriction in the ascitic dog strikingly reduced the rate of ascites formation even in the presence of severe hypoproteinemia.

Many authors have reported on the hormonal role in the control of sodium and water excretion. Experimental evidence^{28,30} indicates that renal sodium excretion is not necessarily controlled by glomerular filtration rate or by renal blood flow either in the normal state or in clinical conditions associated with edema. Most evidence points to the renal tubular reabsorption of sodium as having the main influence upon the ion, and indicate that this sodium-saving device probably functions independently of the posterior pituitary anti-diuretic hormone.³¹ Hyatt⁴ states that the kidneys themselves do not determine the extent of salt and water retention, but probably act blindly to stimuli to which they are tuned.

Of importance along this line of reasoning is that evidence suggests adrenal cortical hyperactivity may occur in conditions characterized by general edema and ascites.³² According to Davis and associates,³⁰ cortisone and desoxycorticosterone acetate had little effect on ascites formation in ascitic dogs, but when these dogs were subjected to bilateral adrenalectomy, marked sodium excretion and diminution of ascites occurred. In these animals it was only after the ascites had disappeared that adrenal insufficiency manifested itself. These animals could then be maintained on desoxycorticosterone acetate without the return of ascites as long as larger doses were not used.

As previously stated, there is evidence that the posterior pituitary anti-diuretic hormone may act directly upon the renal tubules, but that it does so independently of sodium retention. However, Verney³³ demonstrated that elevation of serum sodium probably induces elaboration of this hormone and that depression of serum sodium inhibits the formation of the hormone. Ralli and associates²² showed that an increase in an anti-diuretic factor often occurred in the urine of patients with cirrhosis and ascites. They originally postulated that failure of the damaged liver to inactivate this substance was important in increasing the rate of ascites formation. Other workers^{7,34} however, have not been able to demonstrate the consistent presence of such a factor in the urine of patients with ascites or in the ascitic dog. It has also

been postulated³⁵ that a liver with critical parenchymal damage may fail to inactivate the hormones of the adrenal cortex and the posterior pituitary and certain sex hormones which are known to possess some salt-retaining properties.

According to Shorr and associates,³⁶ there is evidence that the liver itself may excrete a biologically active material which has certain antidiuretic properties. This material appears to be excreted in increased quantities in patients with ascites or cardiac failure.

There appears to be little doubt of the importance of the sodium ion in the genesis of ascites incident to hepatic fibrosis of the portal or congestive type, but the mechanism and hormonal role remain to be clarified.

Site of Ascitic Fluid Formation

The experimental and clinical data indicate that the formation of ascites is more complex than mere transudation from the splanchnic capillaries by the simple process of filtration subsequent to portal hypertension and lowered colloidal osmotic pressure.⁴ Several workers^{6,37} have demonstrated by experimentation that portal venous occlusion alone did not provoke ascites, but that when the thoracic inferior vena cava was constricted, voluminous ascites developed. Such data clearly point out the importance of hepatic congestion in ascites formation and indicate that the liver is the possible source of fluid.

These and other studies have suggested that ascites is derived directly from hepatic lymph. It has been known for many years that when protein escapes from the capillaries it is taken up by the lymphatic system. It is also known that the protein content of ascitic fluid approaches that of plasma in contrast to the low protein content of most peripheral types of edema. Hyatt and associates⁴ have subjected ascitic dogs to laparotomies with wide exposure and report the constant formation of drops of fluid on the liver surface while all other viscera exposed became comparatively dry. They found that this fluid and fluid taken from the hepatic lymphatic vasculature approach closely to plasma in protein content. Freeman³⁸ found that if a dog's liver is surgically transferred to a supradiaphragmatic position and then congested by thoracic inferior vena caval constriction, ascitic fluid formed in the thoracic cavity alone.

Drinker and associates³⁹ suggest that the in-

trinsic capillaries of the liver are extremely permeable to protein. Since the hepatic lymph vasculature probably takes up most protein that permeates the hepatic capillaries, Gray⁴⁰ postulated that during hepatic congestion the production of lymph may be so brisk as to overwhelm the lymph channels with extrusion of the substance into the peritoneal space. Hyatt⁴ feels that it would be more feasible, under similar circumstances, for the limited carrying power of the lymphatic vasculature to compel the extrusion of the fluid directly from the liver tissue spaces. Along this line, a number of investigators^{5,7} have mentioned the presence of subcapsular lymphatic dilatation associated with congestion of the liver.

Thus, the observations of an augmented liver lymph flow, the high protein content of liver lymph and ascitic fluid, and the exuding of a proteinous fluid from the liver surface strongly suggest that in experimental ascites of hepatic congestion and possibly hepatic fibrosis, some of the water and much of the protein of ascitic fluid is derived from the liver capsule.

Dynamics of Ascites Formation

The question now arises as to the steps leading to the accumulation of peritoneal fluid. Severe longstanding hepatic stasis from congestive or portal cirrhosis leads to distortion of the intrahepatic circulation and sets the stage for escape of fluid into the peritoneal cavity. At some point in the process, circulatory homeostasis is altered to the extent that salt and water retention occur. When this stage is reached, a vicious cycle probably operates. As sodium and water are lost to the abdominal cavity, further retention of these substances occurs and there is further fluid formation, possibly from the liver capsule. The loss of large quantities of plasma protein into the ascitic fluid adds more insult by lowering the effective osmotic pressure of the blood, favoring even greater fluid accumulation.

The ascitic fluid thus formed has been found to be in dynamic equilibrium with the blood. McKee and associates⁴¹ have demonstrated by radio-active-tagged plasma protein that a complete turnover of ascitic fluid albumin occurs approximately every two days. They found that the globulin exchange was somewhat slower. Prentice⁴² and associates, using tritium-labelled water in a study of ascitic patients, estimated that from 40 to 80 per cent of the total ascitic volume enters and leaves the peritoneal cavity each hour.

Summary and Conclusions

1. The influence of such factors as portal hypertension, osmotic pressure, intra-abdominal tension, and sodium and water balance, based on clinical and experimental evidence, in the formation of ascites was discussed.

2. The evaluation of clinical and experimental data emphasizes the importance of sodium and water metabolism in the genesis of ascitic fluid. The role of hormones in this metabolic process was stressed.

3. Evidence was presented which indicated that portal hypertension, osmotic pressure, and intra-abdominal pressure influence ascites formation only in a secondary manner.

4. Data were presented which suggest that the liver is the primary site of the fluid formation when ascites occurs in cases of hepatic congestion from a variety of causes; and, the importance of the hepatic lymphatic vasculature was discussed in relation to the site of ascitic fluid formation.

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EYESTRAIN*

W. LLOYD ADAMS, PH.D., M.D.
Lexington, Kentucky

EYESTRAIN is a broad subject which is considerably better understood today than it was a hundred years ago when it was commonly attributed to masturbation or spermatorrhea and treated by cauterization of the urethra.¹ Its implications and ramifications are so diversified that a short discussion of this subject must be somewhat arbitrary and limited. Whether it be called eyestrain, asthenopia, weak-sightedness, ocular neurosis, or any one of about twenty synonyms, our main theme is discomfort or difficulty attending the use of the eyes.

Signs and Symptoms

The signs and symptoms of eyestrain may be mild or severe, single or multiple, barely noticeable or practically disabling. Since most of them are not peculiar to eyestrain, they are not pathognomonic but serve to indicate that their cause should be investigated by appropriate examinations. Some of these signs and symptoms are:

(1) The facies often calls attention to eyestrain. We are all familiar with "tired" appearing eyes, e.g. the wrinkled brow, the frown, the reddened (hyperemic) conjunctivae, the diseased lids. Presbyopic women or men who refuse, for reasons of vanity, to wear much needed glasses and prefer a bleary-eyed existence are quite numerous, and may be recognized at a glance.

(2) An inability to read at a normal distance from the eyes leads to strain. The jocular complaint that "my arms aren't long enough to read the paper any more" is commonplace with the onset of presbyopia. When reading matter is held unusually close to the eyes it may indicate marked myopia or very poor visual acuity from other causes.

(3) Twitching of the eye-lid (blepharoclonus) may be quite conspicuous or it may be noticeable only to the patient. When the condition first appears, it is usually so annoying that treatment is sought. Marked tics, of course, may be entirely ignored by the patient after they are established for some time. Mothers are sometimes quite concerned by the frequent "blinking" of the eye-lids which may appear in

their offspring during the pre-school or early school periods. Usually this is a passing phase but may require examination if it persists for months.

(4) Squint (heterotropia) in a child over six months of age is a sign which should never be passed over lightly. Beware of him who says, "Don't let it worry you; the child will grow out of it." Too frequently amblyopia and poor muscle coordination are permitted to develop in these cases which, if treated soon enough, would have obtained normal vision. The proper time to guard against poor vision is between one and five years of age. Waiting until the child enters school usually is too late for effective treatment.

(5) Head tilting, head nodding, a tendency to close one eye, or nystagmus, especially when seen in the preschool child, always should be investigated. Poor visual acuity or extra-ocular muscle incoordination may be indicated by these signs.

(6) Hordeolum, chalazion, marginal blepharitis, conjunctivitis, or keratitis often result from passive congestion of the lids which paves the way for infection from dirty hands which rub strained eyes. By sustained contraction of the orbicularis muscles the palpebral fissure is maintained as a stenopaeic slit to improve vision in many cases of astigmatism and irregular refraction. The circulation is then poorer in the lids and the passive congestion leads to malfunction of the tarsal glands and to less resistance of the eye lids to infection.

(7) A marked change in refractive findings over a relatively short period of time should be a warning. When a patient reports that previously satisfactory glasses have suddenly become unsatisfactory, or if the history reveals changing of the glasses every three or four months, the etiology of the change should be sought. Ciliary muscle spasm, diabetes, cataracts, glaucoma and drugs are among the possible causes of such changes.

(8) Lacrimation or epiphora is an annoyance to many patients who "have to wipe the tears out of my eyes" before attempting to read. This eyestrain may be due (a) to environment (smoke-filled room, allergy, fumes), (b) to

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obstructed naso-lacrimal drainage, (c) to excessive tear formation (nervousness, emotion, irritation of corneae or conjunctivae), (d) to glaucoma or (e) to a host of other causes.

(9) A "sandy," "gritty," or burning sensation in the eyes is very common and frequently is mistakenly attributed to a foreign body or an infection for which treatment is sought. It is more often noticed at the onset of presbyopia or after excessive near work.

(10) Headache is perhaps the most common of all complaints accompanying eyestrain. It is located variably throughout the head, about the eyes, in the occiput, or radiating to the neck. Occipital headache appearing after near work is usually related to the eyes, but the source of most headaches must be sought by elimination of various causes such as sinus infection, coryza, allergy, or glaucoma. Headache due to eyestrain can be referred to any part of the first division of the 5th cranial nerve. Pain may be the result of easily discovered disease, or may be prodromal as in herpes zoster or sympathetic ophthalmia.

(11) Photophobia may be real or it may be only a symptom of neurosis. Following or accompanying sunburn, arc welding or corneal ulceration, true photophobia is usually relieved by local surface anesthesia. There are, however, some individuals who seem unable to function without constant wearing of tinted lenses. This may be due to lack of pigmentation in the retina and choroid, as best exemplified by the albino, and as seen in very light, blue-eyed, blonde individuals. Other people suffer from disease or refractive errors which they seek to ameliorate by resorting to tinted lenses but which might more sensibly be eliminated if the true etiology were determined.

(12) Frequently the only manifestation of eyestrain noticed by the patient is an alternation of clear and blurred print when he attempts to read. The ciliary muscles are thereby announcing that they can not sustain a smooth tonic contraction because they are overworked.

(13) Sometimes nervousness and irritability attending close work may be the only indication of eyestrain. This disappears in such cases if adequate refractive correction is provided.

(14) A constant dependence on eye-washes (collyria), eye drops or the eye-cup may indicate eyestrain. Only certain conditions which are temporary or which attend old age require the use of these preparations.

(15) Nausea or gastric upset from reflex central action sometimes follows the correction of marked astigmatism. The patient on first trying his new correction sees a temporarily distorted world—or so he thinks: walls are not straight, sidewalks are tilted, objects lean at angles. It is only after central spatial interpretations are re-oriented that the appearance of the new order of things is accepted as correct, and some time may be required to feel at home with things seen as they truly are. In glaucoma the reflexes of increased intra-ocular pressure and pain often cause nausea and also vomiting. Diplopia, too, is known to be one of the most frequent causes of nausea and dizziness.

(16) There is a marked difference in the ability of patients to function with one eye alone. If disease, surgery, or orthoptic training suddenly removes one eye from use, some patients notice considerable strain on the eye remaining in use, while others function almost as efficiently as ever. This strain may simply be psychological, or it may indicate the need for assistance in the functioning of the eye which is in use.

(17) The amount of effort required for the eyes to do close work may be too great when added to the fatigue present at the end of the day, so that when reading is attempted the patient becomes drowsy. On the other hand, reading glasses may allow work to be continued. Contrarily, the relaxation allowed by the reading glasses may be an insurmountable inducement to sleep.

Causes

In reviewing the signs and symptoms above it may be noted that among the causes of eyestrain are:

(1) Developmental factors. The process of seeing is a learned skill which begins at birth, receives marked impetus with macular development at approximately the sixth month of extra-uterine life and is mostly completed by the sixth year. Any factor which interferes with the normal use of the eyes in these first six years is a hazard which may lead to unalterable lifetime consequences (amblyopia, squint, asthenopia).

The highest degree of visual skill depends on the habits and reflexes acquired in the first few years of life. It is characterized by normal visual acuity of each eye, the refinement of intricate extra- and intraocular muscle coordinations, and the perfection of higher centre

mental interpretations which leads to fusion and stereopsis. The importance of examination of the pre-school child when there is any indication of failure in the proper development of visual skill can hardly be over-emphasized.

Extraocular muscle imbalance or incoordination can vary widely in degree. Relatively small vertical imbalance may be the source of intense strain, while the lateral imbalances (eso and exophoria) are usually greater in magnitude before they produce distress. Apparently eyestrain is directly proportional to the amount of work or effort which is necessary to keep the eyes focusing together. If the maintenance of fusion requires too much work, binocular vision may be given up. Eyestrain may then disappear, but more insidious effects are liable to develop (suppression, amblyopia, abnormal retinal correspondence).

(2) Environmental factors. (a) Illumination. Good illumination requires not only that there be a sufficient amount of light, but that there be no flicker or glare. A surprising number of office workers mistakenly incriminate fluorescent lighting as the source of their eyestrain, but fluorescent lighting is excellent except when flicker is present in a worn-out tube which should be replaced. Glare from glossy paper, glass desk tops, or a window, etc., is more often the disturbing factor. Another source of strain is marked contrast of illumination. Thus, reading should not be done with only a spot of light on the reading material. Rather, the room should be generally well-lighted, with only a small supplementary light if required.

(b) Irritants. Industrial fumes, gases, smog, cigar or cigarette smoke and allergenic materials sometimes cause much distress or annoyance in the form of burning, itching, watering, or other discomfort of the eyes.

(3) Personal factors. There are almost innumerable personal factors which may favor eyestrain. Disease of teeth, sinuses, ears and debilitating diseases can affect the eyes adversely. Certain drugs may increase eye difficulties, e.g., the ganglion-blocking drugs used in treating hypertension, or belladonna preparations too freely used in gastro-intestinal disease. Habits of poor posture or of holding near work too close to the eyes, or of sitting too close to the T.V. screen may produce eye discomfort. General habits of inactivity, sedentary occupation or unwholesome work may decrease the

physiologic reserve and bring on eyestrain.

The muscles of the eyes do not differ from any other muscles in their capacity to become fatigued or exhausted. The child with uncorrected myopia is more prone to do excessive amounts of reading and other close work because of his inability to participate in the out-of-door games and play which depend upon adequate distant vision. He truly lives in a circumscribed world unless the handicap is removed by appropriate lenses.

Some patients may apparently have very severe eyestrain for which no cause can be found on complete ophthalmologic examination. Ocular neurosis should then be considered. The incrimination of the eyes may consciously or unconsciously serve only as a means of avoiding certain situations with which the patient can not otherwise cope. The attention, pity, or excuses which the alleged distress may elicit may entrench the neurosis and require psychiatric treatment.

(4) Refractive factors. The state of a patient's refraction is of such major importance in the etiology of eyestrain that it requires special attention. (a) Accommodative insufficiency is probably the most frequent cause of eye distress. Hyperopia, presbyopia, or unusual amounts of close work cause fatigue of the ciliary muscles and as age increases, the amount of work the eyes must do to accommodate and sustain focus increases as the lens loses its flexibility. Astigmatism tires the eyes by the extra work of the unconscious alternation of focus between principal meridians as the eye seeks to clear blurred images and to interpret what is seen. The additional strain and sequelae of maintaining the palpebral fissure as a stenopaic slit has been mentioned above.

(b) Aniseikonia is the condition of disparity in the size of retinal images produced in each eye. If the size difference is too great because of anisometropia, eyestrain may be present until correction is made by the special lenses available for this condition.

(c) Improper prescription or use of glasses may bring on eyestrain. Over-correction, induced prismatic strains (both vertical and lateral), or incorrect cylinder axes may cause as much distress as those which occur naturally (v.s.). It should be repeated that the small errors are often more distressing than are larger ones. Because of the latter, it is important that each prescription be correctly filled by a skilled

MANAGEMENT OF VILLOUS TUMORS OF THE RECTUM*

JAMES A. FERGUSON, M.D.
Grand Rapids, Michigan

"VILLOUS tumors" of the rectum are not common but they are seen with some regularity. The individual lesion is a large, flat, mucosal neoplasm with myriad superficial fronds which is copiously bathed in mucus and resembles a moss-covered rock beneath the surface of a shallow stream. The term "villous tumor" is a clinical term and is applied to papillary adenomas which achieve sufficient magnitude so that their salient characteristics can be recognized grossly.

Papillary adenomas, regardless of their size, are usually sessile lesions which spread superficially and often follow the normal topography of the rectal mucosa and its folds. These lesions are generally solitary but do occur infrequently in parts of the colon other than the rectum and rectosigmoid.

The proper management of villous tumors of the rectum involves the principles of the surgical management of all sessile adenomas whether they be papillary or non-papillary. These lesions located elsewhere in the colon would generally be excised by segmental resection of the involved bowel.

Because of location, and of the technical limitations inherent in the rectum, modes of treatment *other than radical resection* have been advocated. Systematic approach to the problem helps to identify those cases in which local excision should be done. A heedless and needless removal of the rectum is tragedy if a patient's safety can be assured without it.

Clinical Judgment is of Paramount Importance

All of these lesions should not be locally excised, nor should they all be radically removed but how can they be identified? An examiner must determine to his own satisfaction, whether the sessile adenoma of the rectum is clinically benign or whether it is clinically

maligant. If the lesion is clinically benign, it will have a uniformly soft texture and appearance. There will be no visible ulceration or noteworthy irregularity, there will be no palpable induration or loss of mucosal mobility, and no "stickiness." More can often be determined by the finger than with the eye. Higher lesions can be palpated with the scope itself or the sucker tip.

If clinical benignity is established, local excision of the lesion in its entirety for total biopsy should be done providing barium enema with double contrast is negative and providing that the procedure is technically possible.

The technique of local excision of these lesions, which may often be very large, depends upon several factors. Can the lesion be adequately exposed? Can the site of excision be accurately controlled? Can excision be complete? The rationale of the procedure of local excision of these tumors must be carefully explained to the patient. He should understand that laboratory examination of the tissue after total removal might necessitate more radical excision of the part. Regular follow-up examinations must be assured.

If a sessile adenoma of the rectum is clinically malignant, however subtly so, it should be managed as a mature cancer. Biopsy of the areas in question should be done rather than a total excision biopsy. We have seen none of these lesions which was clinically malignant which could not be proved to be histologically malignant by spot-biopsies of the suspected areas.

If a sessile adenoma of the rectum is clinically benign, and there is reasonable hope that local excision can be done, it should be considered, and it might be definitive.

Techniques

Several techniques of local excision of difficult lesions of rectal mucosa have been developed. Most of these methods are trans-rectal but there are one or two which involve open-

optician whose major objective is exact work.

Summary

A number of the characteristics of eyestrain are enumerated with short, pertinent comments. Some prescriptions for glasses tax the ingenuity of the most skilled optician, and "run-of-the-

mill" work in such cases can vitiate the objective of a most careful refractive examination. Some of the causes of asthenopia are briefly discussed.

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*Presented before the Ohio Valley Proctologic Society, Cincinnati, Ohio, January 11, 1957.

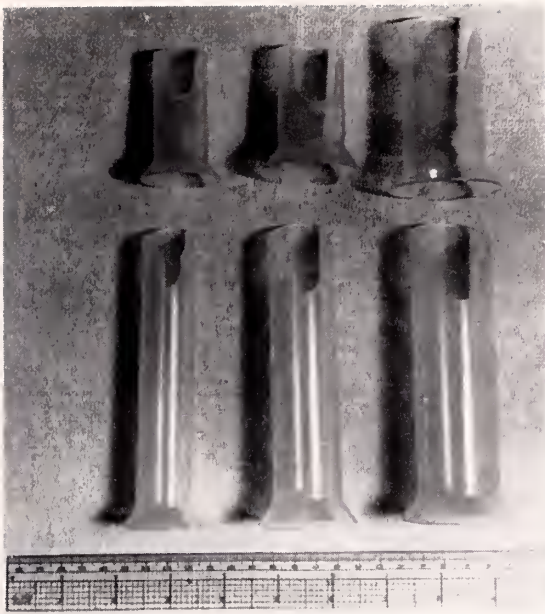


Figure 1

Plastic operating proctoscopes for exposure and local excision of rectal adenomas.

ing the posterior rectal wall. Posterior proctotomy without division of the sphincter musculature can be done, with or without removal of the coccyx. Posterior proctotomy with incision of the entire anal muscle ring can also be done as recommended by Bevin. It is unusual that a lesion which can be removed locally, need be removed any other way than through the anal canal. With good anesthesia, the anal canal can be widely dilated and a suitable operating proctoscope can be inserted, affording excellent exposure of the area of the ampulla involved. Exposure satisfactory for operating usually cannot be gained above the 12 to 15 centimeter level and it will be necessary even at these levels to stabilize the area of the lesion by guide sutures in the adjacent mucosa before excision is attempted.

The scope which we have developed for this purpose is illustrated in Figure I. A set of lucite tubes, flanged at one end and fluted at the other, is very adaptable. These scopes vary in size from 2.5 to 1.5 inches in diameter and in length from two to four inches. This simple instrument affords excellent exposure of tumors of the rectum and excision can be done, either with a cold knife, the electric loop, the electric snare, or the electric knife, and under direct control. It is ideal to remove the lesion in its entirety with the electric snare as it greatly facilitates serial section and accurate histologic diagnosis. In many instances, this is not pos-

sible and the lesion must be resected in more than one major segment and the residual tufts of adenomatous tissue then removed with the electric loop. Circular muscle fibers in the bed of the lesion, must of necessity be exposed to insure adequate mucosal removal. Bleeding is not a serious problem and can be controlled with fulguration. Following withdrawal of the lucite operating proctoscope, a standard 25-centimeter proctosigmoidoscope should be used to scrutinize the results and to detect any residual tissue which may have been overlooked

Follow-up and Control

Follow-up observation and control starts immediately and sigmoidoscopy should again be done seven days following operation. It is perfectly amazing how small tufts of papillary tissue can sometimes be found within a few days after removal of a primary lesion in a patient on whom excision is thought to have been completely thorough and adequate. It is arbitrarily advisable to scope these patients at monthly intervals postoperatively for six months, every three months for the ensuing year, every six months for the first five years and every year thereafter.

Surgical specimens of clinically benign, sessile, adenomas of the rectum will consistently show some histologic evidence of atypical changes such as hyperchromatism, mitotic figures, etc., without evidence of a mature neoplastic change. In sixteen specimens thus submitted, only four were completely benign, eleven showed atypical changes, and one showed "carcinoma in situ." In these sixteen patients, twenty-eight operations were done and three of the patients have been lost to follow-up. In twelve individuals, followed for not more than seven years, and not less than one year, clean scars at the site of excision can still be visualized, and there has been no long range recurrence. In one young male patient of 35 years, a very large papillary adenoma of the rectum was excised locally in 1950 and seven subsequent operations of recurrent or persistent adenomatous tissue were done. Pathology reports on tissue removed originally showed "carcinoma in situ" and on the following excisions, showed "granulation tissue," "pre malignant polyp," "rectal polyp, benign," "rectal polyp, benign," "bit of colon mucosa," "rectal polyp, benign," "rectal polyp, pre malignant." This particular patient has been seen at six-month

intervals for the past four years and there has been no recurrence. He is a well patient with a normal rectum.

In three other patients, on whom a diagnosis of villous adenoma was made clinically, there was some gross evidence of malignant change which was subtle but undeniable and spot biopsy of the suspicious areas confirmed the diagnosis of adenocarcinoma. Radical excision of the involved organ was done in these cases. Subsequent histologic study confirmed the diagnosis and mode of treatment.

In working out the above principles for the management of sessile adenomas of the rectum, a series of 19 patients has been studied ranging in age from 35 to 77 years. The average age is 61 years and the sex distribution is equal.

All of these lesions were of the so-called "villous tumor" type which means that they were papillary adenomas of sufficient size to be grossly recognizable. In sixteen of these patients, a clinical diagnosis of benignity was made. In only four of these did the pathology report say unequivocally "benign." The other twelve were reported as having some degree of atypical cells.

A written report from the laboratory is not

enough in itself. It is far wiser for the clinician to consult the pathologist personally, to study the tissue with him and to weigh the serious implications involved in electing a course of treatment. Radical excision of the rectum for a clinically benign, sessile adenoma is to be decried. Many such rectums can be saved providing the clinician has a well formulated plan of strategy regarding these particular lesions. Clinical evaluation of benignity or malignancy is of equal importance with the pathologic study of the tissue involved. Good clinical evaluation depends entirely on the clinician's experience, judgment, and orderly approach. He should not be stampeded by a laboratory report without further consultation.

No tables of treatment and no dicta can be followed, and the core of the matter rests entirely on sound clinical judgment, individualization of the patient, and correlation of both with laboratory findings.

Summary

Local excision of a *clinically benign* sessile adenoma of the rectum should always be done and, under certain controls as outlined above, it may well be definitive.

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LARGE HEMANGIOMA OF THE LIVER

W. H. CAVE, M.D.
Henderson, Kentucky

HEMANGIOMATA of the liver are a fairly frequent finding at autopsy or laparotomy but rarely cause symptoms sufficient to require resection. There are about seventy reported cases of resection undertaken because of the severity of symptoms. Because of fear of uncontrollable hemorrhage, only recently has a more aggressive attitude been taken toward the resection of large blocks of liver tissue.

In 1942 Schmacher¹ reviewed sixty-six reported cases of liver hemangioma and added one of his own. He vividly described his experience of encountering a large hemangioma of the liver and being presented with the problem of whether or not resection of the tumor would relieve the patients symptoms. There is an unfortunate paucity of information about these tumors. The symptoms they are capable of producing are not well known. No one has had a very large experience with the condition and information necessarily comes from individual case reports. One of the standard textbooks⁵ states in one small paragraph describing liver hemangioma, "Occasionally the tumor becomes very large and produces a hepatomegaly usually as the only clinical manifestation."

Manifestations

It is apparent from the cases reported that the tumor may manifest itself in several ways. About half the cases will have as their only complaint the presence of an abdominal mass. A second half will present complaints of biliary tract disease in association with the mass. It seems that the tumor must be quite large to be troublesome as there have been no reports of small tumors producing symptoms. The usual symptoms are epigastric fullness, eructation, dull epigastric discomfort and mild nausea. There may be acute episodes with nausea, vomiting, acute tenderness, fever and chills, and jaundice. It is surmised that these episodes are due to pressure necrosis adjacent to the tumor as the changes found in the resected specimens are consistent with this concept. In many of the cases the initial diagnosis was acute cholecystitis and they were relieved by the resection.

Schmacher¹ attributed the more chronic symptoms to the pressure of the mass upon the

stomach, right colon and transverse colon. In a case reported by Wilson² the patient was jaundiced and had an icterus index varying from nine to one hundred units. In three of the cases reported it was necessary to remove the gall-bladder along with the hemangioma as the gall-bladder fossa was involved, though in only one instance was there pathology of the gall-bladder. In three cases there was spontaneous hemorrhage of the hemangioma which had been diagnosed preoperatively as ruptured ectopic pregnancy, acute appendicitis, and generalized peritonitis.

Hemangiomata of the liver occur more commonly in the left lobe. They may be single or multiple. The latter have been treated successfully with radiation. They occur four and one half times more commonly in females and, being congenital in origin, may occur at any age.

The size of the tumor may vary from that of a walnut to that of a term pregnancy and weights have been reported from fifty-eight to twenty-five hundred grams. About one third have been pedunculated, the type that lends itself well to resection as it is much easier to control the bleeding. In the past, because of fear of hemorrhage from broad based tumors, only the pedunculated ones were resected, this being done by exteriorization, with a constriction ligature about the base and eventual slough of the tumor. In many instances this led to a fatal hemorrhage.

One death following surgical extirpation has been reported, occurring eighteen hours post-operatively, from hemorrhage and shock. One death followed a needle biopsy and of eleven cases biopsied at surgery, five succumbed from hemorrhage. Horsley, in 1916, emphasized that in resection of liver masses care should be taken to excise through normal liver tissue and this is particularly true in liver hemangiomata as the large venous spaces will bleed profusely. Wilson² emphasizes the importance of avoiding rupture of the tumor during surgery.

The diagnosis of hemangioma of the liver is extremely difficult. In only one case of those reviewed was the preoperative diagnosis made and this was on the basis of a bruit over a large tumor mass in the right upper quadrant. As

may be seen in the foregoing discussion the usual history and physical findings are consistent with acute or chronic cholecystitis. The following case report is illustrative of a large hemangioma manifesting itself as a typical acute cholecystitis.

Case Report

A seventy-year-old white female was admitted to the hospital with a history of episodes of post-prandial epigastric discomfort, nausea, belching, and flatulence for the past four years. She had never been jaundiced, had clay colored stools, or dark urine. There had been no weight loss and she had a very good appetite although there was some intolerance to fatty and highly seasoned foods. In the past she had responded well to anti-spasmodics and diet. Four years prior she had had a complete gastro-intestinal x-ray examination which was normal. Three days prior to admission she began to have more epigastric discomfort and was nauseated but did not vomit. Her appetite became poor and she was unable to do her house work. The day prior to admission the epigastric pain became quite severe, requiring an opiate for relief, and she had a chill and vomited for the first time.

When first seen in the hospital she appeared quite ill and there was an icteric tint to the sclera but the urine was negative for bile. Her temperature was 99.6° and she appeared moderately dehydrated. A firm, tender, nodular mass felt in the right upper quadrant descended with respirations and was three fingers below the costal margin. Because of the position of the mass and the patient's symptoms, the impression was that it was a greatly distended gall-bladder. The remainder of the physical examination was not remarkable. Initially the leukocyte count was 10,600 with 78% polys and a normal red cell count and hemoglobin. The urine was negative and the serum bilirubin was within normal limits.

The basic plan was to correct the patient's dehydration and get a complete liver profile and further x-ray studies. However her condition did not improve and she continued to spike temperature and the mass remained exquisitely tender. On the morning of the third hospital day she had a chill and her temperature rose to 103°. At this time her leukocyte count was 18,300 with 83% polys. Six hours later she appeared quite ill with a temperature of 102° and a leukocyte count of 19,500. It was decided that she should be explored.

Under cyclopropane-ether endotracheal anesthesia a subcostal incision was made. Immediately a large hemangioma was noted involving the right lobe of the liver and consisting grossly of about one-third of that lobe. The surface of the hemangioma was studded with varying sized cysts between which were bile stained, scarred appearing areas. The gall-bladder was moderately thickened, emptied easily and contained no palpable stones. The common duct, duodenum, stomach, and head of the pancreas were normal.

The hemangioma was not pedunculated and so mattress sutures of number one chromic were placed thru normal liver tissue just at the junction with the tumor and tied as the hemangioma was sharply resected. Despite these measures brisk bleeders were encountered which were individually clamped and ligated with four 0 cotton. The ends of the chromic suture were left long and tied over Gelfoam® gauze that had been placed against the raw liver surface. Cholecystectomy was necessarily carried out because the gall bladder fossa was a part of the hemangioma. A Penrose drain was left in Morrison's pouch and the wound closed in layers. There was very little blood loss and no blood was given during surgery.

The pathologist reported a portion of liver measuring 10.5 x 8 x 6 cm. Unfortunately it was not weighed. On section there was an irregular outlined deep reddish mass surrounded by normal appearing liver tissue. On the surface it appeared as an area of deep red cysts averaging 6 mm. in diameter. The gall bladder was attached. The serosa of the gall bladder was smooth as was the mucosa and it contained no stones.

Microscopically the section revealed dilated spaces lined by endothelium containing red blood cells. The adjacent liver lobules were compressed and the architecture altered. There were spotty areas of liver cell necrosis infiltrated with polys. The liver cells appeared rich in lipid. The principal fields were unaltered. The gall bladder wall showed fibrosis of the submucosa with lymphocytic infiltration. The pathological diagnoses were: 1. Cavernous hemangioma of the liver. 2. Toxic hepatitis 3. Chronic cholecystitis.

Postoperatively the patient did very well. She was ambulatory on the second postoperative day and was discharged in good condition on the ninth day. She reported one year later

HYDATIDIFORM MOLE WITH METASTASES

JAMES R. FREEDMAN, M.D.

Lexington, Kentucky

HYDATIDIFORM mole is an uncommon disease, occurring in 1:2500 pregnancies; its malignant counterpart, choriocarcinoma, is still more rare. The relation between the two would be comparable to a benign papilloma and a genuine carcinoma. A benign hydatidiform mole would have about the same relationship to the normal trophoblast as a benign papilloma to normal skin epithelium.¹

Characteristics

The development of an hydatidiform mole is considered by some to be a degenerative disease, but it has also been looked upon as being neoplastic. Choriocarcinoma is a tumor that develops from fetal ectoderm, and follows a full-term pregnancy, an abortion, or an hydatidiform mole, and presents an exuberant growth and early and extensive local and general metastases.¹ The etiology of both is still unknown, but in a mole, it is thought that the ovum is at fault.²

In the early development of the chorionic villi, around the periphery of the villus, there develop two rows of cells, an inner single layer of cuboidal cells, the Langhans layer, and an outer layer of cytoplasmic tissue with no differentiation into cells, but with large dark staining nuclei placed at close intervals, called the syncytium. The two layers—the inner Langhans and the outer syncytial layer—are called collectively the trophoblast.

In the benign mole, the trophoblastic proliferation involves both the Langhans layer and the syncytium, but there is no evidence of anaplastic cell changes and no tendency to destructive invasion of uterine tissues. The villous stroma is characteristically very edematous and degenerative, but the villous pattern is well preserved even though greatly dilated villi are seen. The decreased number of blood vessels

during the disease is a direct mechanical cause of the cystic formations. It may invade blood channels, as does the normal trophoblast in a normal pregnancy. Any evidence of anaplastic activity should make us entertain a diagnosis of choriocarcinoma until proved otherwise.

Therefore, in a benign mole, there are three characteristics: 1) trophoblastic proliferation; 2) scantiness of blood vessels; and 3) hydropic degeneration of the chorionic villi.

In choriocarcinoma, the chief feature is invasion by trophoblastic cells into the uterine musculature and blood vessels, accompanied by destruction of tissues, coagulation necrosis, hemorrhage, and complete derangement of the villous pattern. The growth pattern is more important diagnostically than cell changes.

Between the frankly benign hydatidiform mole and the malignant choriocarcinoma, there is an intermediate group referred to as malignant hydatidiform mole, destructive mole, or chorio-adenoma destruens, the first term being the most acceptable. These cases are characterized by a pronounced tendency to invade the uterine and pelvic blood vessels, though distant metastases are rare. This invasive property is a quantitative one. Pathologically there is abnormal penetrativeness into the uterine, para-uterine, and adjoining vaginal tissues and abnormal degrees of trophoblastic proliferation—a vaguer and more individual interpretation.¹

This is a very brief review of the characteristics of hydatidiform mole and choriocarcinoma. For a detailed study, the reader is referred to the works of Novak¹, and Novak and Seah.^{3,4}

Case Presentation

With this as a prologue, the following case is presented. The patient was a 40-year-old white female who had the chief complaint of a "brownish discharge" and a previous "mole."

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**Presented before the Fayette County Medical Society, Lexington, Kentucky, October 9, 1956.*

by letter that she was in good health and had had no further epigastric discomfort or digestive disturbances. It would seem in this instance that the hemangioma was the cause of her difficulty and resection was indicated. Certainly the gall bladder had no relation to her difficulties.

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Past history revealed that her last normal menstrual period had occurred on September 25, 1954. She had been completely amenorrheic until December 30, 1954, at which time she bled quite heavily and was admitted to a hospital in an adjoining town and placed under treatment and observation for toxemia of pregnancy, congestive heart failure, and enlargement of the uterus. At that time she had a 4-plus albuminuria, 4-plus ankle edema, and hypertension ranging around 180/120. After repeated examinations and careful observation, noting progressive enlargement of the uterus almost daily, it was thought that the patient had a mole. Because of her continued bleeding, on January 8, 1955, a dilatation and curettage was done and a large quantity of vesicular tissue was removed which was diagnosed as hydatidiform mole. She progressed quite satisfactorily and was dismissed to be followed by quantitative Friedman tests, which were as follows:

February 1, 1955—1:100 positive; 1:10 positive.

February 7, 1955—1:100 negative; 1:10 positive.

February 14, 1955—1:10 negative; undiluted positive.

February 28, 1955—1:10 positive.

Following this last test, which showed a quantitative increase, it was decided to readmit this patient to the hospital and this was done on March 3, 1955.

Her past history was entirely negative. She had two children living and well, ages 8 and 4, and had had no miscarriages.

Her first menstrual period had occurred at the age of 13, her menses were regular every 28 days and lasted four days. The last normal menstrual period was on September 25, 1954.

Physical examination was essentially negative except for the pelvic, which revealed a mildly relaxed vaginal orifice with a one-plus cystocele and a one-plus rectocele. There was a dirty-brown discharge present in the vagina and in the cervix. The cervix was slightly enlarged, but clean. The uterus was enlarged to approximately $2\frac{1}{2}$ times normal size, anterior, freely movable, non-tender, but very soft. Both adnexae were negative, except for a small enlargement of the left ovary. (A pelvic examination one week prior to this examination by the patient's local physician revealed the uterus to be almost virginal in size. Therefore, in one week the uterus had enlarged considerably).

Impression: Recurrence of hydatidiform mole with possible malignant change.

On the following morning, March 4, 1955, the patient was taken to the operating room and the vagina and cervix were examined and found to be the same as on previous examinations. A laparotomy was then carried out.

The ovaries were slightly enlarged and contained numerous lutein cysts. One large 2 cm. lutein cyst was present in the left ovary. The tubes were not remarkable. The uterus was enlarged and careful examination of the surface showed no hemorrhagic or perforating lesions. A total hysterectomy and bilateral salpingo-oophorectomy was done. The uterus was opened after removal and the endometrium was found to be filled with a hemorrhagic, necrotic mass eroding into the nearby muscle. (Fig. 1).

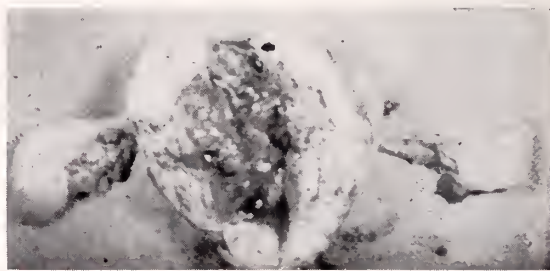


Figure 1

Photograph of uterus, both tubes and ovaries. The uterus has been opened and shows the hemorrhagic, necrotic mass eroding into the myometrium and filling the endometrial cavity. Both ovaries are enlarged and contain lutein cysts.

Numerous dilated cystic spaces resembling "grapes" were found in the myometrium, particularly arising from the fundus. The appendix was removed routinely and was not remarkable. The patient left the operating room in good condition and her convalescence was satisfactory.

Microscopically there was a small amount of pus present in the appendix, but no particular mucosal change. The ovaries contained numerous lutein cysts, with some decidual changes in the stroma. The tubes were not remarkable. The cervix showed marked hydropic changes in the squamous cells, as is usually seen with pregnancy.

Sections of the endometrium showed a fairly constant picture. In some areas there was marked villous overgrowth with varying amounts of trophoblastic proliferation. Hemorrhage and necrosis on the surface were marked, but did not extend appreciably into the underlying stroma. In some sections there was invasion of the wall of the uterus by these trophoblastic elements, but often singly and not in

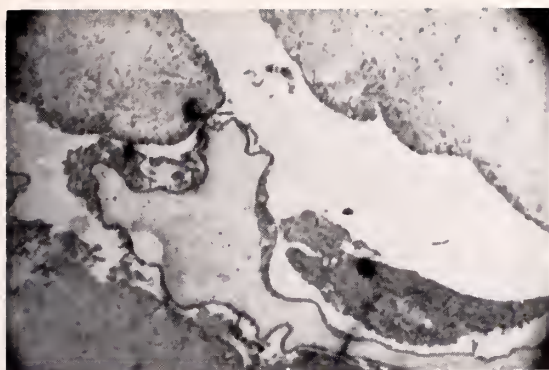


Figure 2

Photomicrograph showing hydropic degeneration of the chorionic villi, trophoblastic proliferation, and lack of blood vessels—a picture consistent with benign hydatidiform mole.

cords or clumps of cells. Most of the invading cells seemed to be syncytial elements and there was a marked chronic inflammatory reaction in association with this—a syncytial endometritis. Some villous elements were found in association with almost all the trophoblastic proliferation.

Vascular invasion was easily demonstrated in most of the sections (Fig. 2). It was the pathologist's impression that this resembled most closely the chorio-adenoma destruens or malignant hydatidiform mole and he noted: "The absence of hemorrhage and necrosis, the absence of marked clumps of invading cells militates against the diagnosis of choriocarcinoma. The invasion of the blood vascular structures and the myometrium, and the marked trophoblastic proliferation fit very well with the diagnosis of chorio-adenoma destruens." There was also an incidental acute appendix.

Sections were then forwarded to Dr. Emil Novak in Baltimore for his appraisal and comments.

At the time of her discharge from the hospital one week later, the patient's hemoglobin was 12 gms. and she was placed on Mol-iron,[®] two tablets three times a day after meals. A chest film was taken prior to her leaving the hospital and we were quite shocked at the report: "There are at least five fibro-nodular densities in the left lung field and at least seven in the right, all in the periphery of the lungs, sharply margined and discreet and are evidence of metastatic disease" (Fig. 3).

A repeat Friedman test was done on April 7, 1955 and was positive in undiluted urine, but negative in 1:10 dilution.

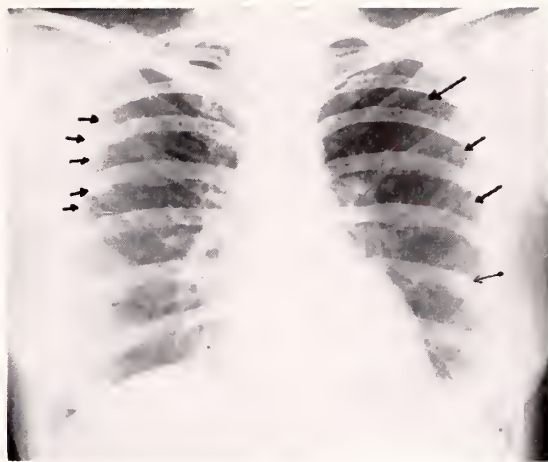


Figure 3

X-ray of the chest showing the fibro-nodular densities in the periphery of the lung fields bilaterally (see arrows).

A letter was received from Dr. Novak who had reviewed the sections and reported that they showed "a residual benign hydatidiform mole associated as is so often the case, with a considerable degree of discrete trophoblastic proliferation and infiltration which is commonly spoken of as syncytial endometritis. . . . The designation of chorio-adenoma destruens is ordinarily based on one of two considerations. One of these is an undue amount of trophoblastic proliferation, far more than that seen in these sections. The other criterion is of almost clinical nature, since it refers to undue penetrativeness into and through the uterine wall, into the peritoneum or vagina, of villi which may be histologically entirely benign. . . . the prognosis should be excellent."⁵

The patient was seen in the office on April 22, 1955; the incision was well-healed; B. P. 130/70; weight 150 pounds. A chest plate was taken and showed "the nodular densities to be still present without significant change." She was placed on Testosterone Lingusorbs,[®] 10 mg. four times a day.

On June 24, the Friedman test was entirely negative in both 1:10 and undiluted urine, and the chest film, in comparison with her film 3½ months previous, showed "the interval complete disappearance of all nodular lesions noted previously" (Fig. 4).

On October 10, 1955, the lung fields were still clear and there was no evidence of parenchymal disease; the Friedman test was negative; weight 160 pounds; hemoglobin 97%. She was placed on Dexamyl,[®] 10 mg. daily and on a reducing diet.



Figure 4

X-ray of the chest taken 3½ months after surgery, showing the complete disappearance of all nodular lesions previously noted.

On January 26, 1956, Dr. Novak wrote that he had again reviewed the sections and they were "perfectly benign . . . with no histological evidence of malignancy." As far as the X-ray shadows, he stated that he could not arbitrarily explain them except to say that even X-ray men are willing to concede the fallability of such findings, and that even benign hydatidiform mole or chorio-adenoma destruens can at times metastasize to the lungs and can disappear spontaneously.⁶

On March 26, 1956, one year post surgery, the patient presented no complaints other than weight gain to 170 pounds.

In March, 1957, the patient wrote that she had no difficulties, was feeling fine, her weight remaining the same, and that a chest plate taken two weeks prior to her writing was entirely negative.

Discussion

We know that the trophoblast possesses many of the characteristics of cancerous growths by its penetration into the maternal blood stream and by the lodgment of the trophoblastic tissue in distant maternal organs, particularly in the lungs. This "deportation of villi" is a perfectly normal process, constituting a physiologic type of embolism and metastasis. This invasiveness is apparently held in restraint by two factors, according to Novak.¹ One factor

is the defensive role of the decidua, which provides a buffer or local defensive action against the invasion, and the other is of a systemic nature. These factors help to explain the spontaneous disappearance of lesions in the chest in a normal pregnancy, as well as in the case cited. They also help to explain the disappearance of residual trophoblast left deep in the uterine wall even after a careful curettage. However, practically nothing is known as to the nature of the defense mechanism against trophoblastic penetration or invasion.

The treatment of hydatidiform mole and choriocarcinoma has varied in the past as is seen in the literature and as we noted in a survey of cases in a private hospital.⁷ In the light of our present day knowledge, we now have a more definite plan of treatment. The results of that treatment in the malignant cases, however, have much yet to be desired. Removal of the uterus, tubes, and ovaries may need to be done and in some cases a definite diagnosis will not be established until this is carried out, for the diagnosis of choriocarcinoma must be decided by an experienced clinician-pathologist under the microscope.

As for pulmonary metastases, a rather hopeless prognosis is depicted. Androgens and estrogens⁸ have been used, and more recently nitrogen mustard and x-ray.⁹

I will not delve into the other various aspects of treatment, for they are covered thoroughly in the writings of others and those interested can find them readily.

In summary, I have presented a rare case of benign hydatidiform mole with metastatic lesions in the chest that disappeared after 3½ months.

The patient is living and well two years after noting the lesions and after surgery.

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CASE DISCUSSIONS

From The
University of Louisville Hospitals



COARCTATION OF AORTA WITH POSTSTENOTIC ANEURYSMAL FORMATION

Louisville General Hospital

PRESENTATION

D. E. R., a 26-year-old housewife, was discovered to have a heart murmur at the age of 13 and was advised to restrict her participation in athletic events at her school. During routine physical examination on entering college, her blood pressure was found to be elevated. Without further investigation into the etiology of her hypertension, a "hypotensive" drug was prescribed. The medication was discontinued by the patient after a very short period. During premarital physical examination at the age of 24, she was again told she had both hypertension and a heart murmur. At this time, a diagnosis of coarctation of the aorta was made. An aortogram was proposed but was deferred for unexplained reasons. Two years later she entered the Louisville General Hospital for treatment.

Her past history was entirely negative. She had always been in good health, and participated in playing and competed in sports with other children until the age of 13. No dyspnea or cyanosis was noted on exertion. Physical examination revealed a well developed and nourished young woman of her stated age. Her stature was small. Her height was 4 feet 11 inches, and her body weight 93 pounds. A Grade 1 diastolic murmur was present along

left sternal border and a faint "machinery" murmur over the second I.C.S. transmitted posteriorly. The thorax showed no visible collateral circulation. The pressure reading in right arm was 154/116 and in left arm 160/118. The femoral pulse was absent bilaterally. The pressure readings in both lower extremities were zero.

Discussions

J. T. LING, M.D., Department of Radiology: P. A. and left lateral films (Figs. 1, 2) of the chest revealed no cardiac enlargement. Moderate notching of the inferior margins of the ribs was present bilaterally, involving the 4th to 9th ribs. The aortic knob was hypoplastic, and the main pulmonary artery was of normal size. The descending thoracic aorta was on the left side. A somewhat oval-shaped mass, measuring about 3.8 x 5 cms. in size, was seen overlying the aortic knob and the main pulmonary artery. Along the periphery of this mass, laminated calcareous deposits were noted. At fluoroscopy, only transmitted pulsations were visible. It could not be separated from the aortic shadow, and indented the barium filled esophagus (Fig. 3) on its left lateral margin.

Selective antegrade aortogram (Figs. 4,5)

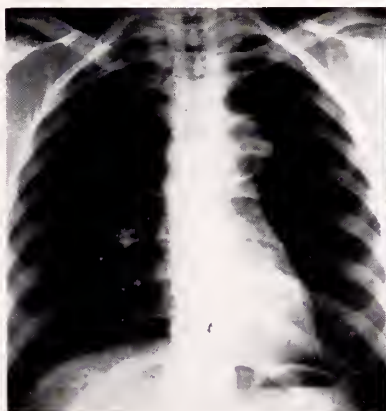


Figure 1

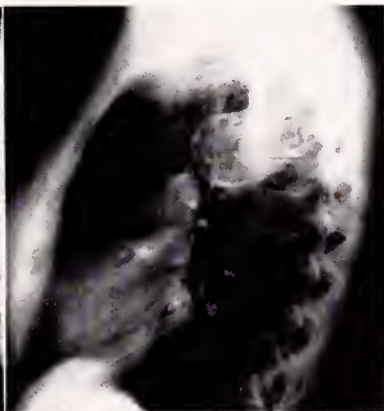


Figure 2



Figure 3



Figure 4

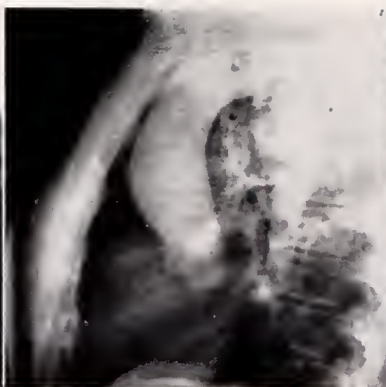


Figure 5

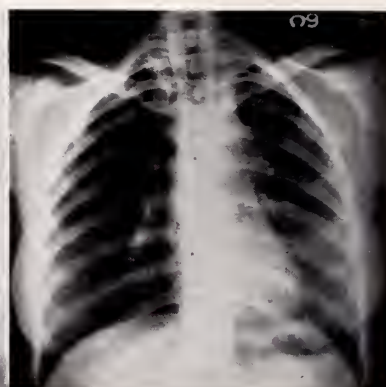


Figure 6

was performed by introducing a #8 Courmand catheter into the right brachial artery. The tip of the catheter was placed at the transverse portion of the aortic arch. 12 c.c. of 70% Urokon were injected under high pressure and films were exposed at the rate of six per second and synchronously in the lateral and anteroposterior projections with an Elema biplane serial angiographic table. The ascending aorta was moderately dilated. The stenotic area was short, measuring about 2 cm. in length, and was located just distal to an anomalous left innominate artery. The partially calcified mass appeared to arise from this region, and represented most likely a thrombosed poststenotic aortic aneurysm. Poststenotic dilation in aortic coarctation is commonly seen and is analogous to poststenotic dilation in pulmonic valvular stenosis. True aneurysmal formation is rare in both instances. The other possibility will be an aneurysm of the intercostal artery in this region.

At operation, the stenotic segment was located immediately distal to the anomalous left innominate artery and measured approximately 2 cm. in length. A thrombosed aortic aneurysm, measuring about 5 cm. in diameter, was found to arise from the poststenotic region. Both the coarctation and the aneurysm were resected and replaced by a 3 cm. long aortic homograft. (Fig. 6).

LEONARD LEIGHT, M.D., Department of Medicine: Coarctation of the aorta, one of the causes of hypertension which is curable, is a disease of considerable clinical significance.

The diagnosis of this anomaly can readily be made on a clinical basis by the fact that there is a differential in blood pressure between the arms and legs. Simple routine palpation of the

femoral artery probably suffices to rule out coarctation of the aorta in the majority of hypertensives, though probably routine blood pressure determination in the leg should be done in all patients with hypertension since a fairly well palpable femoral artery pulsation may be present with mild coarctation of the aorta. Although in the case presented here we felt that there was no evidence for an accompanying cardiac anomaly, other anomalies with coarctation are common. Perhaps the most common accompanying anomaly with coarctation of the aorta is a bicuspid aortic valve which may be functionally insignificant and give no clinical sings. Other congenital cardiac anomalies not infrequently associated with coarctation of the aorta include patent ductus arteriosus, inter-atrial septal defect, and sub-aortic stenosis. From a clinical standpoint, coarctation tends to be more common in males and frequently occurs in very well and powerfully built individuals in striking contrast to the frequent poor physical development in patients with other types of congenital heart disease. The symptoms in coarctation can be referred to: (1) Hypertension in the upper part of the body with not infrequent cerebral symptoms though malignant hypertension is extremely rare if it occurs at all. (2) Low pressure in the lower part of the body with symptoms of easy fatigability, coldness and occasionally intermittent claudication, in the legs. (3) Cardiac symptoms caused by the increased burden on the left ventricle with left heart failure as a possible complication. During the first decade of life, death is mostly due to bacterial endocarditis or complicating anomalies. During the second decade, rupture of the aorta and intracranial hemorrhages become more frequent. Although heart failure may occur in infancy,

once the patient has passed through the early years of life, heart failure does not usually become frequent until middle age.

Physical examination in patients with coarctation of the aorta usually reveals signs and symptoms expected with hypertension, such as cardiomegaly, and left ventricular hypertrophy. Hypertension is usually present, but an occasional case of coarctation of the aorta presents no hypertension in the upper extremities.

Murmurs, usually systolic in nature of a variable degree of intensity, are common over the precordium. One occasionally hears diastolic murmurs over the precordium in patients with uncomplicated coarctation of the aorta. Other evidence of collateral circulation, such as murmurs, thrills, and pulsation over the chest, are frequent, these findings being most common around the scapula. Finally, from a clinical standpoint, it is of interest that abdominal coarctation, a relatively rare variant of this anomaly, may simulate a pheochromocytoma.

The presence of a poststenotic aneurysm is the second such aneurysm that we have seen at this hospital in the last 3 years in patients with coarctation of the aorta. The occurrence of poststenotic dilation is, of course, not unusual in patients with heart disease, such a phenomenon being especially common with valvular pulmonic stenosis and also occasionally with acquired aortic stenosis. The presence of this aneurysm is a most interesting phenomenon, not only from a hemodynamic standpoint, but also because rarely a mediastinal mass is suspected before the presence of a coarctation of the aorta is realized. Other changes in the aorta are also quite common and these include dilatation of the ascending aorta, dilatation of the poststenotic segment, and a peculiar indentation of the aorta where it makes the transition into the descending aorta.

HERBERT T. RANDELL, JR., M.D.,
Department of Surgery: Coarctation, with rare exceptions, can easily be diagnosed on a clinical basis. Further information, of particular value

to the surgeon, as to the position of the stricture, its length and associated anomalies, such as aneurysm formation, is often obtained from the angiocardigram. Demonstration of probable aneurysm in this patient prevented possible delay of surgery by enabling us to have proper homografts immediately available.

The incidence of aneurysm, usually of the intercostal vessels just distal to the stricture or of the aorta just distal to the stricture, increases with the age of the patient. Clagett and associates reported 10 aneurysms distal to the site of stricture in 124 cases, and Gross 21 aneurysms in 270 patients more commonly in the terminal portion of an intercostal artery just as it joined the aorta. Gross found it necessary to use an aortic graft in 11 of these patients and for various reasons, in 23% of patients in the third decade of life as compared to 6% in the first decade.

According to Reifstein and associates 74% of patients with coarctation of the aorta die as a result of the lesion before the age of 35, about one-third at an average age of 28 from bacterial endocarditis or aortitis, one-third at an average age of 27 from rupture of the aorta occurring frequently below the coarctation and one-third from complications of hypertension, usually cardiac failure, at an average age of 39 or intracranial hemorrhage at an average of 28 years.

The mortality from operations for coarctation has steadily declined. Gross reported 15 fatalities in his first 100 cases, but only 2 in his next 100 cases. Clagett and Jampolis reported a mortality of 7.1% in 70 cases, but no mortality in their last 55 cases, and Bahnson a mortality of 9% in 119 surgical cases.

The need for surgery, preferably in the second decade before the vessels become inelastic and friable and complications develop with increased operative risk should thus be apparent and strongly recommended once the diagnosis is made.

SPECIAL ARTICLES

AN OPPORTUNITY OF ORGANIZED MEDICINE*

RICHARD R. SLUCHER, M.D.

Presidential Address

WE, the organized physicians in this country, are not a large enough group to stem the trend toward socialism in this nation today. We are, however, a big enough group to devise plans to slow down this socialistic trend as far as medicine is concerned.

First, think how important it is to help the medical profession gain back the dignity it held thirty years ago. Certainly in the past thirty years, medical science and techniques have advanced more and faster than in the history of the world, and today we are capable of giving better medical care than has ever been given; and yet, the profession as a whole is not respected and held in as high esteem as it was thirty years ago.



Dr. Slucher

Physicians have been so busy keeping up with the great progress medicine has made and working so hard at their practices that they have forgotten some of the art of the Practice of Medicine. There is no physician in this audience that has more respect than I for the physicians before my generation. They did not have as much to work with as we have, but they had the art of the Practice of Medicine, and their patients loved them. They had no public relations problems in those days.

If physicians will use their intelligence they will take advantage of one sure thing, and that is that everybody likes his own doctor even though he may not have a great love for the medical profession as a whole. Therefore, it is up to each individual doctor to go back to the art of practice of medicine and to quit treating their patients as case numbers, diseases, conditions, or procedures. Why—right here in this city as well as in many other cities I am told

that in some doctors' waiting rooms patients take a number off a hook when they enter and later are invited in to see the doctor not by name but by number. This is obviously not offering a very personalized service.

A physician must be a good citizen as well as a good doctor. This, of course, means participation in community projects, chest drives, knowing your state legislators and congressmen, taking part in civic clubs and attending church.

Doctors are their own worst enemies. The two or three percent that are "off base" are the ones who make the news and give the profession a black eye. Unfortunately it is the capers of the few that provide the basis on which the many are apparently judged.

In the newspapers and magazines they write good and bad things about us. Any daily newspaper or any magazine you pick up now will have one or two articles about medicine or doctors.

Why all this good and bad publicity about medicine and about doctors? Mainly I believe that in the past twenty years, as in other countries throughout the world, there is a gradual trend toward socialization and I believe we get our greatest criticism because we use our influence in resisting this trend. It is because of what medicine has always stood for, and because we are what we are, that we are the target of the socialists.

And let me say right here—It is a real privilege to belong to the AMA and I believe that every physician should quickly and cheerfully pay his dues. Had it not been for the good work of the AMA seven years ago, we might have compulsory health insurance today. Let me assure you of one thing—there will be more need for organized medicine in the future than there has been in the past.

The economic conditions of this country in the past twenty years have been very good and doctors, as well as the rest of the people, have

*Presented at the 1957 Annual Meeting of the KSMA in Louisville on September 19.

profited by it. We have never had it so good. Let us not forget that with abundance goes obligation.

What is our obligation? What can we do about it? We must take time to pass our advantages on because it is best for the people of this country. Our nation has the best medical care of any nation in the world and our nation is the healthiest nation in the world. This has not happened by accident, it has happened through and because of the free enterprise system in this country.

We must, through our patients—for our patients, wake up the voters of this country, influence legislation concerning medicine, illness, disability, retirement, et cetera, so that it will be best for the people of this great country. We must show our patients that there is a delusion entertained by many Americans that one can get something for nothing from the government.

And what is worse, thrifty, hard-working, self-supporting citizens have their voting power cancelled by the vote of millions of uninformed people. HR 7225 increased Social Security taxes by $\frac{1}{4}\%$ each on employers and employees, and $\frac{3}{8}\%$ on the self-employed. There is considerable danger of enactment of a law authorizing the federal government to initiate a cash disability insurance program, even though restricted at the start, will lead directly to the complete nationalization of medicine. Next May and June, some vote-conscious law makers will try to push through Congress an amendment that would give all social security beneficiaries free hospitalization after age 65—It would be an easy matter once started, to reduce the age limit to 60 or even 50. Gentlemen, we have a real fight ahead of us.

When we consider the tremendous success of Blue Cross-Blue Shield in the past twenty years, we wonder how the nation and the medical profession ever managed to get along without it. In the realm of politics alone, Blue Cross-Blue Shield has brought about a decided change in the trend of events. I refer to socialization. History shows that socialization begins with medicine, and I am of the firm opinion that if it were not for Blue Cross-Blue Shield this country would have gone down the road of socialized medicine along with England and other free countries.

Here in the United States, the hospitals and the medical profession accepted the challenge of a great social problem and consequently the

threat of socialization in our country has been successfully resisted.

The probability of socialization has not been eliminated. Far from it! The threat remains. We must look upon Blue Cross-Blue Shield to help us do, in the future, what they have done in the past—give the people the medical care they need at a cost they can afford to pay without any interference from a third party. As you are aware Blue Shield is an effort sponsored by the medical profession to satisfy a public need and still retain the fee-for-service, free choice of physician system that is so much in the public interest. We are obligated to provide medical care and we must continue to properly operate our program. The record speaks for itself. Millions of people are covered by Blue Shield.

Such universal acceptance means that the answer medical groups have provided for the social problem of our time is both practical and altruistic. Good medicine must vigorously resist any distortion of the doctor-patient relationship by a third party. Blue Shield has retained this relationship and for this reason merits the active cooperation of the medical profession who founded it, and who is responsible for the rules and regulations. Its acceptance by the people is proof that the people like voluntary plans instead of compulsory plans.

Sure, it would be fine to have fee-for service transacted solely between patient and doctor, but this is not possible in most instances, for changing times have altered methods of payment. We have had to develop budget plans. Our economic system has forced budget buying on most of our people. Since changing times have forced alterations in the system of satisfying our human needs, we would be completely stupid if we did not accept the inevitable, work with it, and develop a plan which will operate in the best interests of our patients. Just as our forefathers had to work out a system of freedom and cooperation in the early development of our nation, so do we, the medical practitioners of modern America, have to work out a plan for adequate and just medical care for all people without disturbing that basic freedom, the doctor-patient relationship.

Blue Shield has been most helpful up to this point, but the time has come when we must enlarge Blue Shield benefits. The consumer wants more coverage. Expanded coverage is the order of the day, particularly into the so-called ex-

tended, catastrophic, comprehensive or major medical areas, depending upon the term you wish to use for the same thing.

The purchasers, whether they be employers, farmers, organized labor, or individuals, want the plans to be alert and on their toes—seeing new challenges and advancing to meet these challenges. We should say to ourselves—Since we started our program off, where have we gone and what progress have we made? And then—Where do we go from here?

We must extend benefits for the long-term expensive illness. We must try to come up with a plan through Blue Cross and Blue Shield that will be acceptable to union leaders in order that these leaders will not go to closed panel groups or self-administer their own plans. Equally as important is changing our Blue Shield Plans so that they will more adequately care for our rural people. This seems to me to be our big problem of the present day.

The public looks to us to lead the way toward more adequate health insurance. The people in Massachusetts have pioneered the extended benefits movement and deserve our heartfelt thanks. Delaware with its Hercules Power contract was the first plan to put into effect the extended benefits. Several other states are planning to extend their benefits.

We must convince ourselves first, then we must convince our Plan Trustees and Plan Manager and Director to enlarge our plan. We and they must be convinced that it is in the public interest, and in their own best interests to extend our benefits. Buyers of health insurance are creating their own yardsticks for measuring the adequacy of coverages, and in many respects our Blue Shield Plan falls short of this yardstick. Perhaps we should work much more closely with the directors of our own plan, making sure all major groups in medicine have a voice as to the form health insurance developments in Kentucky should take.

We doctors must understand our own plan and why we had to start with surgical coverage and in-hospital benefits. It is a good plan so let us not criticize our own plan and call it the "Surgeons' Plan." We have every right to be proud of our plan. In the last year our own Plan in Kentucky has been broadened to cover more thoroughly the medical emergencies as well as the surgical emergencies. Within the last month, broader coverage has been approved again, and policy forms are now being printed.

I wish a Plan could be devised through Blue Cross or Blue Shield, or both, whereby diagnostic work could be paid for in the private physician's office or laboratory. I realize this would be a big undertaking and it would set the actuaries wild and probably greatly increase the premium rate, but I am sure it would lighten the load of diagnostic patients in the hospitals everywhere, thereby relieving the bed shortage so that we would be able to get our really sick patients a bed.

It is emphasized by some labor unions that it is not so important how many millions of people are covered by Blue Shield but how well they are covered. So we must concern ourselves with this phase in our future planning.

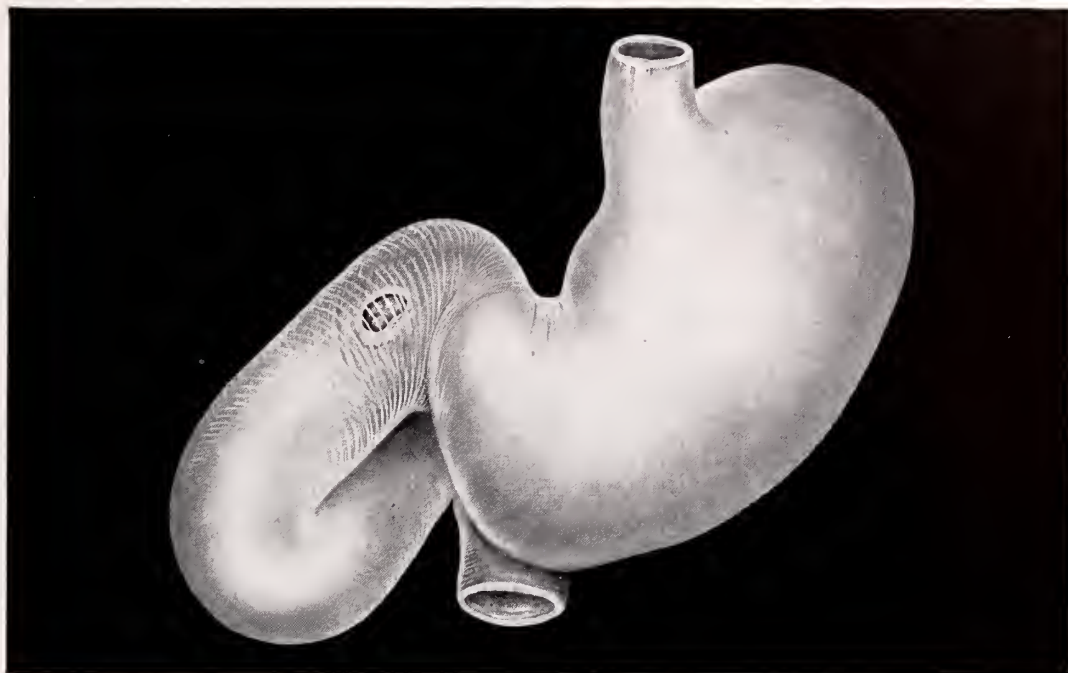
We must understand clearly and emphasize always that while Blue Shield and organized medicine are mutually dependent, they must be parallel and not merged. Blue Shield is a service organization, while medical societies are professional groups and these separations of functions must be maintained.

Most of us surely must believe that the American public will eventually become the dominant influence in shaping the image of health insurance. Then it is high time we concerned ourselves with anticipating the consumer attitudes and seeking to direct them in channels that are the best for the public. The basic contract should be broad and as comprehensive as possible within the price range attractive to all. The price must also be stabilized over a reasonably lengthy financial cycle, if Blue Shield is eventually to be, as it should be, the truly effective key to the solution of the whole general problem of pre-paid medical care.

Naturally, Blue Shield cannot be all things to all people. If we put in too many benefits, then we force the price too high.

Unless we do enlarge the coverage by Blue Shield, I greatly fear the medical profession will have to surrender its prerogatives of responsibility to government, either federal, state or local, which will take over as guarantor of the public trust.

We must know that we will have to provide an adequate pre-payment plan or surely we will have a "post-payment" plan sponsored by the government. If we lend our talents in the same intelligent and unselfish manner to the solution of this problem, as we have to improving and extending the benefits of medical science, this will never happen.



Pro-Banthine® “proved almost invariably effective in the relief of ulcer pain,

*in depressing gastric secretory volume and in inhibiting gastrointestinal motility.”**

“Our findings were documented by an intensive and personal observation of these patients over a 2-year period in private practice, and in two large hospital clinics with close supervision and satisfactory follow-up studies.”*

Among the many clinical indications for Pro-Banthine (brand of propantheline bromide), peptic ulcer is primary. During treatment, Pro-Banthine has been shown repeatedly to be a most valuable agent when used in conjunction with diet, antacids and essential psychotherapy.

Therapeutic utility and effectiveness

of Pro-Banthine in the treatment of peptic ulcer are repeatedly referred to in the recent medical literature.

Pro-Banthine Dosage

The average adult oral dosage of Pro-Banthine is one tablet (15 mg.) with meals and two tablets at bedtime.

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*Lichstein, J.; Morehouse, M. G., and Osmon, K. L.: Pro-Banthine in the Treatment of Peptic Ulcer. A Clinical Evaluation with Gastric Secretory, Motility and Gastroscopic Studies. Report of 60 Cases, Am. J. M. Sc. 232:156 (Aug.) 1956.

SEARLE

ARALEN[®] *in* RHEUMATOID ARTHRITIS

Extensive studies of rheumatoid arthritis and related collagen diseases—in this country and abroad—have shown the antimalarial Aralen phosphate to be highly effective and well tolerated in a large percentage of patients.

Clinical Results with Aralen in Rheumatoid Arthritis

Author	No. of Cases	Major Improvement	Minor Improvement	No Effect
Haydu ¹	28	22	5	1
Rinehart ²	25	12	4	9
Freedman ³	50	43	3	4
Bagnall ⁴	108	77	12	19
Bruckner ⁵	36	32	0	4
Cohen and Colkins ⁶	22	17	3	2
Scherbel et al. ⁷	25	9	8	8
Total	294	212 (72%)	35 (12%)	47 (16%)

- Success dependent upon persistent treatment
- Often of benefit where other agents have failed
- Remissions on therapy well maintained
- Remission of 3 to 12 months possible even if treatment is interrupted
- Tachyphylaxis not evident

GENERAL EFFECTS:

- Patient feels better
- Patient looks better
- Exercise tolerance increases
- Walking speed and hand grip improves

LABORATORY EFFECTS:

- E. S. R. may fall slowly
- Hemoglobin level may gradually rise

ANALGESICS AND STEROIDS:

- Requirements usually reduced or eliminated

JOINT EFFECTS:

- Pain and tenderness relieved
- Mobility increases
- Swellings diminish or disappear
- Muscle strength improves
- Rheumatic nodules may disappear
- Even severe or advanced deformity may improve
- Active inflammatory process usually subsides
- Joint effusion may diminish

DOSAGE:

Aralen is cumulative in action and requires four to twelve weeks of administration before therapeutic effects become apparent.

Latest information indicates that an initial daily dose of 250 mg. of Aralen phosphate is preferable to the higher doses sometimes recommended. However, if side effects appear, withdraw Aralen for several days until they subside. Reinstate treatment with 125 mg. daily and, if well tolerated, increase to 250 mg. The usual maintenance dose is 250 mg. daily.

New Chemotherapy

INDICATIONS:

- Rheumatoid arthritis, acute or chronic—with or without adjunctive therapy.
- Spondylitis
- Arthritis associated with lupus erythematosus or psoriasis

HOW SUPPLIED:

Aralen phosphate: 250 mg. tablets in bottles of 100 and 1000.
125 mg. tablets in bottles of 100.

Tolerance:

Aralen is usually well tolerated. Toxic effects are usually mild and to date have been transitory in nature, disappearing completely either on continuance or cessation of therapy or on reduction in dosage.

Gastrointestinal disturbances (e.g. nausea, rarely vomiting, diarrhea, abdominal cramps, anorexia) are frequent manifestations of intolerance. Temporary blurring of vision (due to interference with accommodation) is also relatively frequent.

Pleomorphic skin eruptions (e.g. lichenoid, maculopapular, purpuric), although generally mild, may preclude the use of an optimum dosage schedule. If a skin reaction persists on a reduced dosage schedule, or recurs after reinstitution of treatment with gradually increasing doses, discontinue Aralen till the lesion again disappears and consider resuming treatment with Plaquenil® (brand of hydroxychloroquine).

Less frequently transitory vertigo, headache, lassitude, or neurological disturbances, such as nervousness, irritability, emotional change, and nightmares have been reported. Instances of unexplained slight gradual weight loss as the patient's general health and arthritic condition improved have been mentioned. Occasional instances of bleaching (depigmentation) of the hair have been described.

Although an occasional instance of leukopenia, with normal differential count, has been reported (WBC about 3000), it has not proved troublesome because it has always been reversible on discontinuance, or diminution of the dose. Even spontaneous reversal may occur while full dosage is maintained.

THEORY OF ACTION:

Aralen appears to suppress or induce remission of rheumatoid inflammatory processes by inhibiting adenosinetriphosphatase.

Caution:

Aralen is known to concentrate in the liver and, although hepatic damage has never been reported, the drug should be used with caution in the presence of liver disease. In the presence of severe gastrointestinal, neurological, or blood disorders, the drug should be used with caution or not at all. If such disorders occur during the course of therapy, the drug should be discontinued. Concomitant use of gold or phenylbutazone with Aralen should be avoided because of the tendency of these agents to produce drug dermatitis.

Clinical Comments:

Of fifty patients receiving Aralen therapy, "43 have become really well; that is, they have no stiffness, and any pain that occurs can reasonably be attributed to use of joints affected by secondary degenerative changes. They have no evidence of joint inflammation, but may have a raised erythrocyte sedimentation rate. They have little or no need for analgesics."

Freedman³

"One hundred and twenty-five private patients have been carefully followed clinically and haematologically while receiving well over 200 patient-years of chloroquine [Aralen] therapy. The results are considered good in 70%, one-half of these cases being in remission. Improved work performance, sedimentation rate, and hemoglobin levels paralleled the major objective gain in this 70%. 90% of them remained on chloroquine [Aralen] therapy, half for more than two years. Classical peripheral rheumatoid arthritis, spondylitis, arthritis of juvenile onset, and rheumatoid disease with psoriasis, all appeared to respond about equally well.

"It is suggested that chloroquine comes closer to the ideal for long-term, safe, control of rheumatoid disease than any other agent now available."

Bagnall⁴

"Out of the 36 rheumatoid arthritis cases we treated . . . favorable results were obtained in 32 cases."

Bruckner et al.⁵

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EDITORIALS



A RECORD TO BE PROUD OF

K SMA members have every reason to be proud of their record of attendance at the 1957 Annual Meeting of the Association.

This year's record attendance of 1094 members—55 percent of the membership—marked an all-time high and brought the average percentage figure for attendance in the past five years to 49 percent.

This figure is 17 percent above the average turnout for associations with memberships of 1600 to 3700 as reported in the March, 1953 issue of the *Pennsylvania Medical Journal*. In that survey, attendance figures for associations with memberships of more than 5000 was only 22 percent.

These figures are pointed to with pardonable pride because they indicate more KSMA members each year are endeavoring to improve the quality of the medical care they render their patients. This is in keeping with our Constitution which states, the purpose of the association includes the "extensions of medical knowledge" and that the profession shall become "more useful to the public in the prevention and cure

of disease and in prolonging and adding comfort to life."

Another interesting and heart-warming aspect of the attendance at the 1957 Annual Meeting is that in addition to the members present, 142 interns and residents, 55 percent of the total taking training in the state, attended the meeting. The percentage has been growing each year.

So let us salute the Committee on Scientific Assembly and Arrangements and its chairman, Richard R. Slucher, M. D., and its sub-committees that had the overall responsibility for the planning of the 1957 Annual Session, for work well done. We commend the product of the effort put forth by the Committee on Scientific and Technical Exhibits, which added depth and color to the meeting. We are deeply grateful to the 12 participating Specialty Groups for their excellent cooperation and fine presentations which contributed to the diversification of the total program.

Woodford B. Troutman, M. D.

WHAT DO YOU MEAN—"NON-PROFIT"?

O NE of the chief distinctions between medically sponsored prepayment plans, such as Blue Shield, and the commercial health and accident insurance companies, is that Blue Shield is conducted on a "non-profit" basis, whereas the insurance companies are frankly business enterprises operated to earn a profit for their owners.

To emphasize this difference is not to imply criticism of either. The insurance companies have a long and honorable history of public service and they are an important part of America's business community.

Blue Shield, on the other hand, serves largely as an agency of the medical profession, performing a community service. Initiated by the medical profession, with the help of local industry, labor and civic leaders, Blue Shield is designed for one purpose only: to help people

pay for medical services whenever the need for such services arises.

As the Blue Shield is a non-profit organization, it is also tax free. For these two reasons, carrying costs are smaller than those of commercial insurance companies. This has led to the cry of unfair competition, a complaint that is not justified. The Blue Shield Insurance Plans developed of necessity because commercial insurance companies did not dare the risk of a new and untried field. Blue Shield pioneered the venture and then commercial insurance companies, finding it a feasible enterprise, came in with a vigor. Blue Shield has succeeded in developing the medical care prepayment movement because the profession has guided it and supported it. Blue Shield's working capital was the pledge of the participating physician to deliver the medical services that

Blue Shield has promised on his behalf. In some cases, the participating physicians have accepted a fraction of scheduled Blue Shield payments in order to tide an infant plan over its early trials.

In every case, local professional leaders have given their Blue Shield Plans incalculable hours of service as trustees and advisers. None has ever accepted one penny of compensation for these services. As an agency of the medical profession, created for the sole purpose of aiding the doctor in serving his patients, there has been no thought of a "third party" to make a profit out of the Blue Shield operation.

Blue Shield's success is measured by the proportion of its income dollar spent for services to its subscribers, the low operating costs, and the ever increasing funds which are being made available for wider coverage.

The Blue Shield operation does earn money, however these earnings are plowed back into the organization instead of being dispersed as dividends. Both patient and doctor profit by the

steadily expanding coverage that is being developed as our reserves are accumulating.

Our Kentucky Blue Shield Plan was started in 1949. The second year of operation 20,819 contracts covering 54,129 persons were in force and 2,228 claims totaling \$190,228 had been paid. Five years later, 146,533 contracts covering 404,431 persons were in force and 75,095 claims totaling \$2,469,522 had been paid. As of September 30 of this year, 181,467 contracts covering 500,823 people were in force. Last year, Kentucky physicians received \$3,497,616 from 116,088 claims.

The interested insight into, the intelligent guidance and loyal support of, and the kindly cooperation with your Kentucky Blue Shield Plan is urged of all Kentucky physicians because this indemnity plan was established for the benefit of both patient and physician alike and therefore deserves the support of both, throughout this our Commonwealth of Kentucky.

Coleman Johnston, M.D.

THE TREATMENT OF THYROTOXICOSIS

AS in every other disease the proper treatment of thyrotoxicosis depends upon an exact diagnosis. The diagnosis of toxicity emanating from the thyroid gland is almost entirely a clinical diagnosis and that fact can not be emphasized too strongly. A complete history and a thorough physical examination are the chief and usually sole requirements for determining the presence or absence of toxicity. Without a good history and examination mistakes are the rule rather than the exception in diagnosis.

The basal metabolism test, uptake of radioactive iodine, amount of protein bound iodine in the serum are useful and helpful but none alone is conclusive. All are subject to great error in performance and interpretation. A basal metabolism test while the patient is under sodium pentothal anesthesia and the response to inorganic iodine or propylthiouracil are rarely necessary for a definite diagnosis but when they are, they can be of tremendous value.

When the diagnosis of toxicity is in doubt then a period of observation for six to eight weeks will usually resolve any doubts. At such

times the course advised by the great Sydenham is imperative. "Nor do I think it below me to acknowledge that when no manifest indication pointed to me what was to be done, I have consulted the safety of my patient and my own reputation most effectually by doing nothing at all."

Once the diagnosis of thyrotoxicosis has been made immediate treatment is indicated and the nature of the treatment depends largely upon the physical characteristics of the gland and the age of the patient. It is not trite to say that every patient should be treated individually as it is so absolutely true. There are some general rules however that can be followed and we believe them to be as follows.

Most adults with toxic diffuse goiter should be treated by the administration of radioactive iodine. Pregnancy is an absolute contraindication to its use. Toxic diffuse goiter in children should be treated by surgical operation after suitable preparation with inorganic iodine or propylthiouracil or both. We do not fear the possibility of cancer at some later date but we do not know as well as we would like the effect upon the growth centers and gonads and other delicate tissues. Rarely the gland is so large in

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

(Continued on page 1048)

for certain disorders of menstruation and pregnancy

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T. M.

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CASE SUMMARY²

Amenorrhea of 4 years' duration in a 24-year-old married woman. A course of 10 mg. NORLUTIN twice daily for 5 days was followed after 3 days by menses lasting about 5 days. Since no spontaneous menstruation occurred during the following 35 days, she was given another course of treatment with NORLUTIN, 10 mg. twice daily for 5 days. This was followed by menses.

When this patient was given ethisterone, 40 mg. twice daily for 5 days, no bleeding had ensued when she was seen 41 days later.

INDICATIONS FOR NORLUTIN: conditions involving deficiency of progestogen such as primary and secondary amenorrhea, menstrual irregularity, functional uterine bleeding, endocrine infertility, habitual abortion, threatened abortion, premenstrual tension, and dysmenorrhea.

PACKAGING: 5-mg. scored tablets (C. T. No. 882), bottles of 30.

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ORGANIZATION SECTION



Diabetes Detection Drive Starts on November 17

All Kentucky physicians, hospitals and laboratories are asked to give a free urine sugar test to any person requesting it during National Diabetes Week, which is being held November 17-23, according to Robert J. Hoffman, M. D., Fort Mitchell, chairman of the KSMA Associate Committee on Diabetes.

The week has officially been proclaimed as Diabetes Week in Kentucky by Governor A. B. Chandler. This year's Diabetes Detection Drive is the seventh sponsored by KSMA in cooperation with the American Diabetes Association. The campaign is unique in that it does not involve fund raising.

"From all indications, it is believed that the 1957 drive will succeed in its two-fold purpose of educating the public to the dangers of diabetes and the discovery of previously unknown diabetics," Doctor Hoffman said.

Past drives which have resulted in the discovery of more than 900 new diabetics, have received wide public acceptance.

Dr. Robertson of Paducah Named KSMA President-Elect

Robert Wintersmith Robertson, M.D., Paducah, was unanimously chosen President-Elect of the Kentucky State Medical Association at the Wednesday evening, September 18, meeting of the 1957 session of the House of Delegates.



Dr. Robertson

Doctor Robertson was born in Hardin County and received his secondary education in Elizabethtown. He graduated from Loyola University School of Medicine in 1931 and in-

terned at City Hospital in Louisville.

Since September, 1948, he has been a member of the State Board of Health. He is currently the President of the Kentucky Surgical Society and is a member of the Kentucky Chapter of the American College of Surgeons. Doctor Robertson has long been active in community affairs and in the McCracken County Medical Society. He has served on a number of KSMA committees, including the Committee on Public Information and Service. Currently, he serves on the staffs of the West Kentucky Baptist Hospital and the Riverside Hospital in Paducah.

Elected vice presidents at the meeting were: John S. Harter, M.D., Louisville, (Central); Richard G.

Elliott, Lexington (Eastern); and Walter R. Byrne, M.D., Russellville, (Western).

W. Vinson Pierce, M.D., was elected to his second term as KSMA Delegate to the AMA. Foster D. Coleman, M.D., Louisville, was elected to his first term as alternate AMA Delegate, succeeding, Leon Higdon, M.D., Paducah.

Drs. O'Nan and Sweeney Elected to Head KSMA Council

Walter L. O'Nan, M. D., Henderson, who is serving his second term as Councilor from the Second District, was unanimously elected chairman of the KSMA Council at the Council's reorganization meeting on September 19. Doctor O'Nan succeeds Hugh Mahaffey, M.D., Richmond, immediate past Councilor of the Eleventh District.



Dr. O'Nan

Active in KSMA affairs for many years, Doctor O'Nan served as first chairman of the KSMA Rural Health movement in Kentucky and organized the Kentucky Rural Health Council.

Doctor O'Nan, head of the O'Nan Clinic in Henderson, graduated from St. Louis University School of Medicine in 1930. He is a past president of the Rotary Club in Henderson.

Garnett Sweeney, M. D., Liberty, Twelfth Councilor District, was elected vice chairman to succeed L. O. Toomey, M. D., Bowling Green. Doctor Sweeney, whose term as councilor expires in 1959, graduated from the University of Louisville School of Medicine in 1939.

Re-elected to the Council for their first full three year terms were: Carlisle Morse, M. D., Louisville, Fifth District, and Norman Adair, M. D., Covington, Eighth District. John Pepper Glenn, M. D., Russellville, was elected to succeed L. O. Toomey, M. D., Bowling Green, in the Sixth District. Joe M. Bush, M. D., Mt. Sterling, was chosen to succeed Hugh Mahaffey, M. D., Richmond, in the Eleventh District. New councilor for the Fifteenth District is Keith P. Smith, M. D., Corbin, who succeeds Charles B. Stacy, M. D., Pineville.

Rural-Urban Understanding Goal of Farm-City Week

"A greater understanding of the interdependence between rural and urban segments of the population" is the goal of National Farm-City Week, November 22-28, which is supported by KSMA's Committee on

Public Information and Service headed by Richard G. Elliott, M. D., Lexington.

A special joint bi-partisan Congressional Resolution calling for the observance of National Farm-City Week was passed early in 1956. President Eisenhower requested everyone's participation in the week and proclaimed it officially last year.

Designed to bring about better understanding and appreciation for the American "way of life," Farm-City Week received the Distinguished Service Award from the Freedoms Foundation in 1955.

The week is sponsored by service, agricultural, professional, industrial, business and trade associations, including the American Medical Association. It is coordinated by Kiwanis International.

The KSMA Committee on Public Information and Service has requested all county societies to cooperate in this opportunity to build better relationships between town and country neighbors.

Drs. Miller and Pigman Honored At Annual Meeting

Two veteran Kentucky physicians, Oscar O. Miller, M. D., Louisville, and Owen Pigman, M. D., Whitesburg, received honor awards on the final day of the KSMA Annual Meeting. Doctor Miller was the recipient of the Distinguished Service Award, and Doctor Pigman was honored as Kentucky's Outstanding General Practitioner.

Doctor Miller, a native Australian who graduated from the University of Louisville School of Medicine in 1911, was honored for his many years of service to the profession and the community. Nationally recognized as a chest specialist, he has served as medical director of Hazlewood and Waverly Hills Sanatorium and was one of the original members of the State Tuberculosis Commission.

A past president of KSMA (1945) and the Jefferson County Medical Society (1939), Doctor Miller



Oscar O. Miller, M.D., Louisville, is shown receiving the KSMA Distinguished Service Award from Woodford B. Troutman, M.D., Louisville, secretary-treasurer, at awards ceremonies on Thursday afternoon, September 19.



Kentucky's General Practitioner of the Year, Owen Pigman, M.D., Whitesburg, accepts the annual general practitioner's award from Woodford B. Troutman, M.D., KSMA secretary-treasurer at ceremonies on September 19.

was one of the co-founders of the Kentucky Physicians Mutual. He has served on the teaching staff of the University of Louisville since 1951 and is present professor emeritus of medicine. His warmth and concern for the personal problems of his patients are among the characteristics which have made him a distinguished member of his profession.

Doctor Pigman, who at the age of 80 has been practicing medicine for nearly half a century, received his M. D. degree from the University of Louisville Medical School in 1907 and entered practice near his native Hindman. He conducted his practice without the use of an automobile until 1923, and estimates delivery of from 2,000 to 3,000 babies.

After practicing in Hindman for six years, Doctor Pigman moved to Letcher County where he engaged in contract mine practice for the next 39 years. Later he moved to Whitesburg where he is now engaged in private practice. He has served as both secretary and president of his county society and is a member of KSMA and AMA. Doctor Pigman enjoys the high esteem of both his colleagues and patients.

Both Doctor Pigman and Doctor Miller have sons in the profession. Doctor Pigman's son, Carl, is in practice with him. Doctor Miller has two sons practicing medicine. Alfred O. is a radiologist in Louisville, and Milton F. is in his third year of residency at the University of Maryland Hospital in Baltimore.

Dr. Bryant Heads Chest Physicians

The Kentucky Chapter of the American College of Chest Physicians elected J. Ray Bryant, M. D., Louisville, as its president at a meeting at the Brown Hotel on September 18. Doctor Bryant succeeds E. Rudolph Gernert, M. D., Louisville.

Other officers elected at the meeting which was held in conjunction with the KSMA Annual Meeting are, Walker Porter Mayo, M. D., Lexington, vice president and Daniel N. Pickar, M. D., Louisville, secretary-treasurer.



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Planning procedure for the Wednesday night meeting of the House of Delegates while at the President's Luncheon are: Clyde C. Sparks, M.D., (left) House Speaker, and George W. Pedigo, M.D., Vice Speaker.

Dr. McFarland Addresses 250 at President's Luncheon

Dr. Kenneth McFarland, "a Ph.D. with horse sense," held the rapt attention of the 250 members and guests in attendance at the annual president's luncheon on the Roof Garden of the Brown Hotel on Wednesday, September 18.

Freedom was the theme of his address "Ropes of Gold," in which he quoted a Minnesota school girl's definition of it as "the right for as many people as possible to be as happy as they can."

Prior to introducing Doctor McFarland, who appeared through the courtesy of the General Motors Corporation, President Richard R. Slucher, M. D., Buechel, introduced guests at three honor tables, including Association officers, guest speakers, and members of the State Board of Health.

Doctor McFarland cited the fact that many people are unable to distinguish basic happiness from having fun and have the feeling that in order to be happy they must constantly be having fun.

"Freedom includes the right to look around and to look up, as well as freedom of the individual personality," he said.

"Eloquence is thought on fire," said Doctor McFarland quoting William Jennings Bryan, and the consensus of physicians in attendance was that in "Ropes of Gold," he epitomized the definition.

Dr. Mersch to Address Meeting of Eleventh District

"Have Friends" is the title of an address which KSMA President Edward B. Mersch, M. D., Covington, will give at the annual dinner meeting of the Eleventh Councilor District at the Daniel Boone Tavern at Berea on November 14, according to Joe M. Bush, M. D., District Councilor.



Dr. Kenneth McFarland, nationally known educator and speaker, pauses for emphasis during his address to those attending the President's Luncheon on the Roof Garden of the Brown Hotel on Wednesday, September 18.

"Doctor Mersch will deal with legislative issues facing the profession in a talk no member of the District will want to miss," said Doctor Bush.

Benjamin D. Boone, M. D., a Louisville surgeon, will discuss "Carcinoid Syndrome" as the scientific part of the program, which will include the latest advances in this field.

House Makes Important Decisions in 1957 Sessions

The adoption of the definition of the "corporate practice of medicine," clarification of the KSMA Bylaws on membership, a study of its Medicare contract and recommendations on civil defense and physical therapy were among the more important actions voted at the second session of an unusually well attended meeting of the 1957 KSMA House of Delegates.

After presiding over his first regular meeting of the House, Clyde C. Sparks, M.D., new speaker of the House, expressed deep appreciation to the members of the seven reference committees, other officials and members of the House for their cooperation in handling a very heavy and important agenda in such a satisfactory way. Doctor Sparks also expressed appreciation to the vice speaker George W. Pedigo, M.D., Louisville, for his assistance.

Following the meeting, Doctor Sparks said that a full digest of proceedings of the two 1957 sessions of the House, including the full text of resolutions and Bylaw changes, would appear in the December issue of the Journal of KSMA.

A Jefferson County Resolution calling for a revision of the Association's policy on Medicare drew serious consideration. Revisions recommended by the Reference Committee and adopted by the House of Delegates called for the appointment of a new committee from members of the House to seek a new contract on a fee for service basis.

In another important House action, the section on the KSMA Bylaws was rewritten. This included clarification of the various classifications of the mem-

bership and provided for reduced dues for physicians who devote full time to teaching in medical schools and research work.

The House approved the "suggested guides to relationships between state and county medical societies and the United Mine Workers of America Welfare and Retirement Fund," which had been accepted by the Council and passed by the AMA House of Delegates in June, 1957.

Other actions of the House included recommendations to the Civil Defense Administration of Kentucky, consideration of a proposed law to license physical therapists, approval of a recommendation of the Council that the payment of AMA dues by KSMA members should not be mandatory, and insertion of a provision in the Bylaws that each council district should have at least one meeting a year in which socio-economic problems that relate to medicine should be discussed.

One of the most debated issues in the House concerned a proposed constitutional change submitted at the 1956 session of the House. The proposed constitutional change related to prohibiting the Association from entering into a fee schedule. The recommended change failed to pass at the 1957 meeting.

EENT Society Elects on Sept. 18

F. Buerk Zimmerman, M. D., Louisville, was elected president of the Kentucky Ear, Eye, Nose and Throat Society, at a meeting of the society held in conjunction with the KSMA Annual Meeting at the Columbia Auditorium on September 18.

Other officers elected at that time include: Arthur H. Keeney, M. D., Louisville, vice president; Alvin Poweleit, M. D., Covington, treasurer; and L. P. Moore, M. D., Owensboro, secretary.

Blue Cross-Blue Shield Mark Milestone in Progress

Fifty physicians attended a special Blue Shield meeting honoring the 500,000th member of Kentucky Physicians Mutual—the Blue Shield plan in Kentucky—at the Kenlake Hotel on October 3.

Principal speakers at the dinner honoring Billy J. Stubblefield, a punch press operator at the Murray Manufacturing Company as the 500,000 member, were Oscar O. Miller, M.D., Louisville; L. Howard Schriver, M.D., Cincinnati; and D. Layne Tynes, executive director of the Blue Cross-Blue Shield in Kentucky. Doctor Miller's topic was "Kentucky Physicians Mutual and YOUR FUTURE" and Doctor Schriver spoke on "Blue Shield—the Answer to Third Party Medicine."

The dinner marked a milestone in the progress of Blue Shield in Kentucky. Kentucky Physicians Mutual—sponsored by KSMA—was founded in 1949 and is governed by physicians and civic leaders who serve without pay as trustees. A non-profit organization, Blue Shield operates under the authorization of the Kentucky State Insurance Commission and the National Blue Shield Commission.

J. Duffy Hancock, M.D., Louisville, president of the Board of Trustees of Kentucky Physicians Mutual stated: "Blue Shield plans of the U. S. are the medical profession's answer to providing doctor's services to the American public on a pre-paid basis. The growth of these plans has given proof that government intervention is not needed and that a voluntary prepayment system is meeting the needs of the people."

In 1956, Blue Cross-Blue Shield paid almost \$3½ million to doctors for care of Kentucky members.



Celebrating a milestone in Blue Shield progress in Kentucky at Kenlake on October 3 are head table guests (left to right) Robert W. Robertson, M. D., Paducah, KSMA president-elect and a member of the Board of Directors of Kentucky Physicians Mutual; Billy J. Stubblefield, a punch press operator at the Murray Manufacturing Company who is the 500,000th member of Blue Shield in Kentucky; Verne O. Kyle, manager of the Murray Manufacturing Company; D. Lane Tynes, executive director of Kentucky Blue Cross-Blue Shield; J. Duffy Hancock, M. D., president of Kentucky Physicians Mutual. Others who were seated at the speaker's table, but are not shown in the picture are: L. Howard Schriver, M. D., Cincinnati, a featured speaker at the dinner; Oscar O. Miller, M. D., member of the Board of Directors and featured speaker and J. Vernon Pace, M. D., Paducah, member of Kentucky Physicians Mutual Board of Directors.

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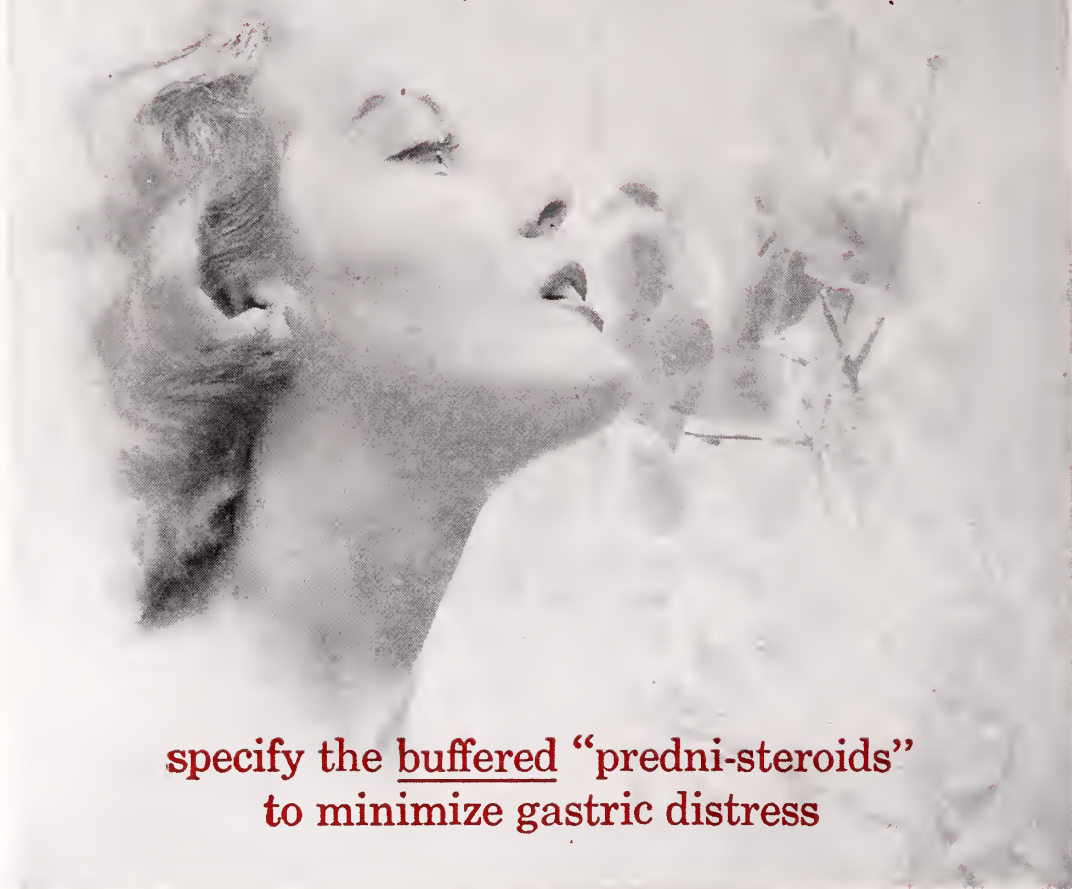
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TENSION	SENILE ANXIETY	MENOPAUSAL SYNDROME	ANXIETY	PREMENSTRUAL TENSION
PHOBIA	HYPOCHONDRIASIS	TICS	FUNCTIONAL G. I. DISORDERS	PRE-OPERATIVE ANXIETY
HYSTERIA	PRENATAL ANXIETY	AND ADJUNCTIVELY IN CEREBRAL ARTERIOSCLEROSIS		
PEPTIC ULCER	HYPERTENSION	COLITIS	NEUROSES	DYSPNEA
PRURITIS	ASTHMA	ALCOHOLISM	DERMATITIS	PARKINSONISM
				PSORIASIS

perhaps the safest ataraxic known

PEACE OF MIND ATARAX[®]

Supplied: In tiny 10 mg. (orange) and 25 mg. (green) tablets. Also now available in 100 mg. tablets. Bottles of 100. ATARAX Syrup, 10 mg. per tsp., in pint bottles. Prescription only.

(BRAND OF HYDROXYZINE)

Tablets-Syrup

10

mg. (t.i.d.)

for these 10 pediatric indications:

ANXIETY TICS
TEMPER TANTRUMS

NOW: SAFE... QUICK

ATARAX[®] PARENTERAL SOLUTION

when Peace of Mind can't wait

In daily practice: always have it handy

- to calm the acutely disturbed or hysterical patient
- to rehabilitate the alcoholic

In hospitals: use it routinely

- to make overwrought patients manageable without loss of alertness
- to allay anxiety and control vomiting before and after surgery and childbirth

Supplied: 10 cc. multiple-dose vials. The adult dosage is 25 mg. to 50 mg. (1-2 cc.) intramuscularly, 3 to 4 times daily, at 4 hour intervals. The moderated dosage level for children under 12, when given intramuscularly, has not yet been established, and the oral dosage should be used.



NEW YORK 17, NEW YORK



On the opposite page are pictures showing some of the highlights of the 1957 Annual Meeting.

Pictured (left to right in the top photo) are Richard R. Slucher, M.D., Buechel, 1956-57 KSMA president; Edward B. Mersch, M.D., Covington, newly installed president for 1957-58; and Robert W. Robertson, M.D., Paducah, president-elect, who will be in office in 1958-59. The photograph was snapped following Doctor Robertson's election at the September 18 meeting.

A record was set late Thursday afternoon, September 19, when 350 people turned out to hear the last scientific presentation of the meeting, a panel discussion on thyroid disease. The panel was moderated by Alton Ochsner, M.D., head of the Ochsner Clinic, New Orleans, who is third from the left in the second picture. Others pictured are (left to right), Richard H. Chamberlain, M.D., Philadelphia; William McK. Jefferies, M.D., Cleveland; Doctor Ochsner; George Crile, Jr., M.D., Cleveland; Stuart C. Cullen, M.D. Iowa City; and Harold Gordon, M.D., Louisville.

Top leaders in the KSMA Woman's Auxiliary are shown discussing plans for the coming year. Pictured left to right in the third picture are: Mrs. Charles B. Stacy, Pineville, 1956-57 president; Mrs. J. Andrew Bowen, Louisville, newly installed president for 1957-58; and Mrs. Jesse T. Funk, Bowling Green, president-elect, who will serve in 1958-59.

Asian flu came in for its share of consideration at the Annual Meeting when WHAS radio in Louisville presented the panel shown in the fourth picture. The program was moderated by Russell Teague, M.D., State Commissioner of Health (second from left). Gardner Middlebrook, M.D., Denver is third from the left and C. C. Howard, M.D., Glasgow, chairman of the Committee on Public Health is at the far right. In the left foreground is Maurice Kamp, M.D., director of Public Health for Louisville-Jefferson County.

Council Appoints Committees for 1957-58

KSMA committees appointed by the Council to serve for 1957-58 were named the last day of the Annual Meeting, according to Walter L. O'Nan, M.D., Henderson, newly elected chairman of the Council.

Physicians serving on the Council's newly appointed committees are as follows:

COMMITTEE ON MEDICAL EDUCATION AND ECONOMICS

Gaithel L. Simpson, Greenville, Chairman
J. Auldin Bishop, Louisville
Morris M. Garrett, Covington
Robertson O. Joplin, Louisville
Claude C. Waldrop, Williamstown

*Associate Committee on Insurance

J. Auldin Bishop, Louisville, Chairman
Lillard F. Beasley, Franklin
Arthur L. Cooper, Somerset
Robert E. Reichert, Covington
Ernest C. Strode, Lexington

*Associate Advisory Committee to the University of Louisville School of Medicine

Robertson O. Joplin, Louisville, Chairman
John G. Archer, Prestonsburg
Mitchell B. Denham, Maysville
C. C. Howard, Glasgow
John S. Quertermous, Murray

*Associate Committee on Veterans

Morris M. Garrett, Covington, Chairman
B. Earl Caywood, Danville
Thomas J. Crume, Owensboro
John Dickinson, Glasgow
Wendell V. Lyon, Ashland

*Associate Committee for Contribution to the American Medical Education Foundation

Claude C. Waldrop, Williamstown, Chairman
Delou P. Hall, Louisville
Paul B. Hall, Paintsville
Coleman C. Johnston, Lexington
James W. Fuller, Mayfield

MEDICO LEGAL ADMINISTRATOR

John D. Gordinier, Louisville

ADVISORY COMMITTEE TO THE EDITOR

Richard J. Rust, Newport, Chairman
James E. Hix, Owensboro
Francis M. Massie, Lexington

COMMITTEE ON PUBLIC INFORMATION AND SERVICE

Richard G. Elliott, Lexington, Chairman
K. L. Barnes, Princeton
William Bizot, Louisville
John Cassidy, Covington
Carl Cooper, Jr., Bedford

COMMITTEE ON PHYSICIANS PLACEMENT SERVICE

Delmas M. Clardy, Hopkinsville, Chairman
N. L. Bosworth, Lexington
Walter S. Coe, Louisville
Julian B. Cole, Henderson
Russell H. Davis, Pikeville
William Mountjoy Savage, Maysville

COMMITTEE ON LEGISLATION

Thomas P. Leonard, Frankfort, Chairman
Norman Adair, Covington
Rufus C. Alley, Lexington
Clark Bailey, Harlan
Branham B. Baughman, Frankfort
William H. Cartmell, Maysville
Delmas M. Clardy, Hopkinsville
J. Duffy Hancock, Louisville
Leon Higdon, Paducah
C. C. Howard, Glasgow
Billy K. Keller, Louisville
Richard J. Rust, Newport
Clyde C. Sparks, Ashland
Charles B. Stacy, Pineville
Alec Spencer, West Liberty
L. O. Toomey, Bowling Green

*Associate Committee to Study Medical Examiner System

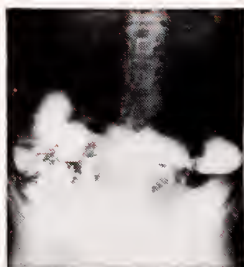
Malcolm L. Barnes, Louisville, Chairman
John D. Allen, Jr., Louisville
Etta W. Best, Lexington
Benton B. Holt, Ashland
William W. Shepherd, Campbellsville
Edward L. Smith, Covington

**Associate Committees do not report directly to the House of Delegates*

Estimated travel income in Kentucky for 1956 was \$561,000,000. This means that for 1956, Kentucky received a little more than 3 percent of the national travel business, according to the news digest of the Kentucky Chamber of Commerce.

when anxiety and tension "erupts" in the G. I. tract...

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Supplied: Bottles of 100, 1,000.



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in spasticity of the GI tract



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125 mg.

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15 mg.

- *is an effective dual antispasmodic*
- *combining musculotropic and neurotropic action plus mild central nervous system sedation for "the butterfly stomach."*

dosage: one tablet before each meal and at bedtime.

SEARLE

NEW HYDELTRA-T.B.A.[®]

(Prednisolone tertiary-butylacetate, Merck)

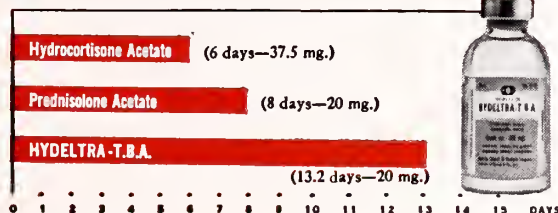
for relief that lasts—longer

in *SPRAINS*—
reduces tenderness,
swelling and
limitation of motion



Osteoarthritis
Acute gouty arthritis
Bursitis
Tendinitis
Trigger finger
Peritendinitis
Trigger points
Tennis elbow
Lumbosacral strain
Capsulitis
Rheumatoid arthritis
Frozen shoulder
Coccydynia
Rheumatoid nodules
Fibrositis
Tensor fascia lata syndrome
Collateral ligament strains
Sprains
Radiculitis
Osteochondritis
Ganglia

Anti-inflammatory
effect lasts longer
than that provided
by any other
steroid ester



Dosage: the usual intra-articular, intra-bursal or soft tissue dose ranges from 20 to 30 mg. depending on location and extent of pathology.

Supplied: Suspension 'HYDELTRA'-T.B.A.—20 mg./cc. of prednisolone tertiary-butylacetate, in 5-cc. vials.



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Immediately following the inauguration ceremonies, newly inaugurated president Edward B. Mersch, M.D., Covington, as his first official act, presents the Past President's Key to Richard R. Slucher, M.D., Buechel, 1956-57 president, (left).

Color Television Popular Feature of '57 Meeting

"Nobody Walked Out on Medical TV Shows"—that headline in a newspaper is descriptive of the interest displayed by KSMA members in the 8½ hours of color television which was a feature presentation of the 1957 Annual Meeting.

The on-the-spot programs, showing actual operations and medical procedures as performed by members of the University of Louisville School of Medicine, were relayed to the Columbia Auditorium from the General Hospital through the facilities of Smith, Kline and French.

Months of preparation by the committee on color television headed by Rudolf Noer, M. D., professor and chairman of the department of surgery at the University of Louisville, went into the presentations which covered a wide range of subjects including, a symposium on the duodenal ulcer and a panel on tuberculosis.

Described as one of the most effective mediums devised for post graduate medical training, the closed circuit color television programs were approved for credit in Category I by the American Academy of General Practice.

Programs of 12 Specialty Groups Praised by Dr. Slucher

The very latest developments in specialized fields were discussed by prominent local and national speakers at 12 specialty group sessions at the Annual Meeting on Wednesday afternoon, September 18.

Richard R. Slucher, M.D., Buechel, the 1956-7 KSMA president, expressed his deep appreciation to the leaders of the 12 participating groups. He said, "The fine programs presented added much to our meeting. It provided our membership with a diversification of material that we could not have otherwise offered."

Out of state physicians who participated in the group sessions as guest speakers included: Stuart C. Cullen, M.D., Iowa City, Kentucky Society of Anesthesiologists; Donald M. Shafer, M.D., New York, Kentucky Eye, Ear, Nose and Throat Society; Alton Ochsner, M.D., New Orleans, Kentucky Chapter, American Academy of General Practice.

Also, Ralph Reis, M.D., Chicago, Kentucky Obstetrical and Gynecologic Society; Robert A. Knight, M.D., Memphis, Kentucky Orthopedic Society; Gardner Middlebrook, M. D., Denver, Kentucky Chapter, American Academy of Pediatrics; John M. Rumball, M.D., Coral Gables, Kentucky Chapter, American College of Physicians; Lawrence C. Kolb, M.D., New York, Kentucky Psychiatric Association; and Richard T. Chamberlain, M.D., Philadelphia, Kentucky Radiological Society.

KSMA Auxiliary Elects Officers

Mrs. J. Andrew Bowen, Louisville, was installed as president of the Woman's Auxiliary to KSMA on September 18 by Mrs. Paul C. Craig, Wyomissing, Pennsylvania, president of the Woman's Auxiliary to the American Medical Association.

Other new officers of the auxiliary are: Mrs. Jesse T. Funk, Bowling Green, president-elect; Mrs. B. T. Harris, Lexington, Mrs. Charles B. Johnson, Russell, Mrs. Merle Mahr, Madisonville, and Mrs. F. H. Hodges, Pikeville, vice presidents; Mrs. J. O. Mattax, Carrollton, recording secretary, Mrs. B. B. Sleadd, Middletown, corresponding secretary; Mrs. Carlisle Morse, Louisville, treasurer; and Mrs. Irving Gail, Lexington, parliamentarian.

COMPARATIVE REGISTRATION FIGURES KSMA Annual Meetings

	1950	1951*	1952	1953	1954	1955	1956	1957
	713	846	693	786	924	938	923	1094
KSMA MEMBERS REGISTERED								
Guest Physicians	126	138	67	75	150	122	157	178
Interns-Residents	85	101	73	100	148	106	105	142
Medical Students	155	330	252	292	284	299	305	328
Registered Nurses	29	27	16	31	25	55	15	28
Exhibitors	135	204	180	153	174	174	218	176
Guests	64	189	80	72	166	121	108	151
Technicians—								
Office Assistants	86	76	49	54	67	50	54	54
TOTAL NON-MEMBERS REGISTERED	680	1065	717	777	1014	927	962	1057
TOTAL ATTENDANCE	1393	1911	1401	1563	1938	1865	1885	2151

*KSMA Centennial



At inaugural ceremonies on September 19, the last day of the Annual Meeting, Edward B. Mersch, M.D., Covington, takes the oath of office from Hugh Mahaffey, M.D., Richmond, (right) retiring Chairman of the KSMA Council.

73 KAGP Members Attend Seminar at Paintsville

Seventy-three members of the Kentucky Academy of General Practice attended the annual KAGP Big Sandy Post Graduate Seminar at the Paintsville Country Club on October 3, according to W. E. Becknell, M.D., Manchester, KAGP president.

The meeting featured four Kentucky physicians who presented papers during the afternoon and participated in a round table discussion following the dinner and social hour. Physicians who gave papers were: McHenry S. Brewer, Daniel E. Mahaffey, John A. Petry, and John L. Wolford, all of Louisville.

Announcement that in the future the KAGP Board of Directors would meet at the annual Big Sandy Seminar was made by Charles Bryant, M.D., KAGP president-elect, who will become KAGP president in April, 1958.

U. L. School of Med. Announces Faculty Appointments

Recent appointments, promotions and changes in staff have been announced by the University of Louisville School of Medicine.

The announcements follow: promotion of Letitia S. Kimsey, M.D., to associate professor of microbiology; appointments of Paul Francis Gulyassy, M.D., and Norman K. Cohen, M.D., as instructors in medicine; James Kenneth Thompkins, M.D., as instructor in dermatology; and George C. Sivak, M.D., as instructor in urology.

Other medical school approvals are: John Paul Stamer, instructor in surgery; Roderick MacDonald, Jr., as assistant professor of ophthalmology and executive director of the section; Edward Foote, M. D., assistant professor of pathology; Robert L. Kelly, professor emeritus of dermatology and syphilology.

Also, Louis Yale Preskoe, M. D., as assistant professor of medicine; Bernard I. Popham, M. D., as instructor in medicine; Marion George Brown, M. D., instructor in orthopedic surgery; Benjamin B. Jackson, M.D., research associate in surgery; and Solomon J. Rosenberg, M.D., assistant professor of medicine.

STUDENT AMA

It would appear that the major problem facing many medical students is one of finance. Because of the comparative high cost of medical education many prospective physicians are discouraged from going into medicine. Our country's need for well trained physicians and scientists has never been greater. In an excellent report on the financial problems facing medical students at the University of Minnesota, O. H. Ravenholt* describes the general situation as follows:

"The number of applicants for entry to existing medical schools has fallen sharply in the past several years to where many of these schools accept with reluctance the last portion of each new class. Coincidental with this disturbing drop in medical school applicants has been a drive by a number of professions to develop and present to secondary school students comprehensive, long-range programs, showing them how an able student's ambitions can lead him step-by-step through an adequate education to useful and responsible life in the given profession.

"The medical profession has made no similar effort to bridge the confused and expensive years that separate the ambitious young student from a career as a medical practitioner. We seem still to trust the idea that 'if he wants to be a doctor, he will be one—come hell or high water, or starvation.'

"The young student who chooses to prepare for a medical career without substantial financial backing must do so with the full expectation of enduring 'hell, high water, and starvation.' And he is all too likely to emerge from this process—if he does survive it—with his ideals colored by a desire to gain financial security and reserves as quickly as possible."

Upon realizing the nature and size of this problem, SAMA formed a Foundation to provide low interest loans and scholarships to medical students throughout the nation. The SAMA foundation was established in 1954; at present things are moving slowly toward the point where loans and scholarships will be available.

In the meantime, much detailed information about the need for funds at various schools must be collected and evaluated in order that a comprehensive picture of the importance of this money may be available to prospective donors. It will be difficult to appraise the usefulness of such a system until it actually functions as it should. Whether assistance of this nature will be sufficient to allow the nation to produce its full complement of qualified young physicians without governmental support is another question.

Clarke Anderson, President
U of L Chapter, Student AMA

**From an article entitled, "A Letter and a Report" by Otto H. Ravenholt, Minneapolis, Minnesota, which appeared in the May issue of The New Physician, Journal of the Student American Medical Association.*

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derivative of
Rauwolfia
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Harmonyl*

combines the full effectiveness of the rauwolfias
with a new degree of freedom from side effects

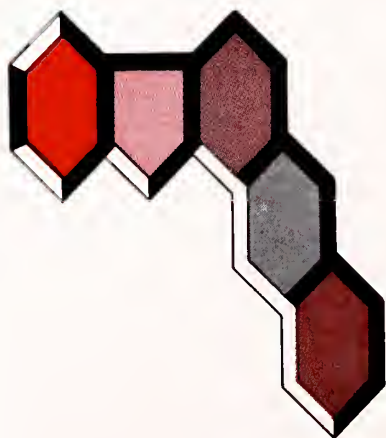
Harmonyl makes rauwolfia more useful in your everyday practice. Two years of clinical evaluation have shown this new alkaloid exhibits significantly fewer and milder side effects than reserpine. Yet, Harmonyl compares to the most potent forms of rauwolfia in effectiveness.

Most significant: Harmonyl causes less mental and physical depression—and far less of the lethargy seen with many rauwolfia preparations.

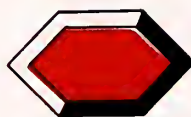
Patients became more lucid and alert, for example, in a study¹ of chronically ill, agitated senile cases treated with Harmonyl. And these patients were completely free from side effects—although a group on reserpine developed such symptoms as anorexia, headache, bizarre dreams, shakes, nausea.

Harmonyl has also demonstrated its potency and relative freedom from side effects in hypertension. In a study comparing various forms of rauwolfia², the investigators reported deserpidine “an affective agent in reducing the blood pressure of the hypertensive patient both in the mild to moderate, as well as the severe form of hypertension.” They also noted that side reactions were “less annoying and somewhat less frequent” with this new alkaloid. Other studies confirm that few cases of giddiness, vertigo or sense of detached existence or disturbed sleep are seen with Harmonyl.

Professional literature on this unique rauwolfia derivative is available upon request. Harmonyl is supplied in 0.1-mg., 0.25-mg. and 1-mg. tablets. **Abbott**



References: 1. Communication to Abbott Laboratories, 1956. 2. Moyer, J. H. et al: Deserpidine for the Treatment of Hypertension, Southern Medical J., 50:499, April, 1957.



* Trademark for Deserpidine, Abbott

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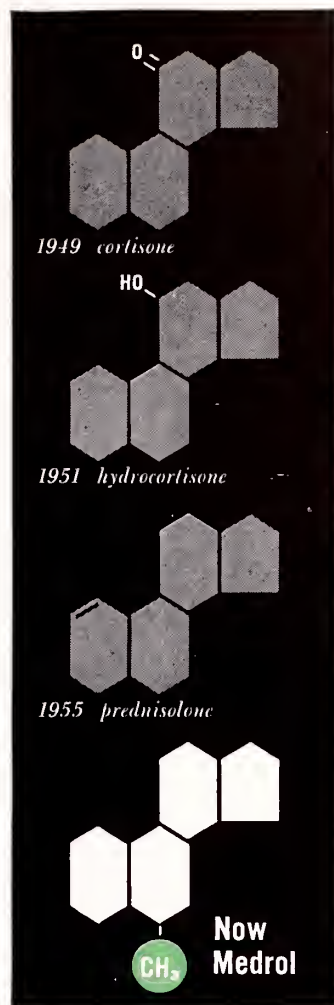
*minor
chemical
changes
can mean
major
therapeutic
improvements*

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($\frac{1}{3}$ lower dosage
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- Better tolerated
(less sodium
retention, less
gastric irritation)

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HOUSE OF DELEGATES ROLL CALL—1957 MEETING*

	OFFICERS	First Session	Second Session
Speaker	Clyde C. Sparks	Present	Present
Vice Speaker	George W. Pedigo	Present	Present
President	Richard R. Slucher	Present	Present
President-Elect	Edward B. Mersch	Present	Present
Vice-President	Karl D. Winter	Present	Present
Vice-President	Carl Norfleet	Present	Present
Vice-President	Charles R. Yancey	....	....
Secretary-Treasurer	Woodford Troutman	Present	Present
COUNCILORS			
District	J. Vernon Pace	Present	Present
First	Walter L. O'Nan	Present	Present
Second	Ralph D. Lynn	Present	Present
Third	W. Keith Crume	Present	Present
Fourth	Carlisle Morse	Present	Present
Fifth	L. O. Toomey	Present	Present
Sixth	Branhm B. Baughman	Present	Present
Seventh	Norman Adair	Present	Present
Eighth	J. M. Stevenson	Present	Present
Ninth	J. Farra Van Meter	Present	Present
Tenth	Hugh Mahaffey	Present	Present
Eleventh	Garnett J. Sweeney	Present	Present
Twelfth	Charles B. Johnson	Present	Present
Thirteenth	Charles C. Rutledge	Present	Present
Fourteenth	Charles B. Stacy	Present	Present
Fifteenth			
PAST PRESIDENTS			
1955	Gant Gaither	....	....
1954	Clyde Sparks**	Present	Present
1953	J. Duffy Hancock	Present	Present
1952	G. Y. Graves	....	....
1951	Clark Bailey	Present	Present
County	Delegate	First Session	Second Session
FIRST DISTRICT			
BALLARD	H. G. Sargent	....	Present
CALLOWAY	Hugh Houston (alternate)	Present	Present
	Conrad B. Jones	....	....
CARLISLE	Russell Rudd	....	....
FULTON	Reeves Morgan	....	....
GRAVES	H. E. Tisworth	....	....
HICKMAN	Leon Higdon	Present	Present
LIVINGSTON	Walter Johnson	Present	Present
MCCRACKEN	Walker Turner	Present	Present
	Joe Miller	Present	Present
MARSHALL			
SECOND DISTRICT			
DAVISS	A. B. Colley	Present	Present
	Howell Davis	....	....
	Charles Wathen	....	....
HANCOCK	Robert English	Present	....
HENDERSON	W. G. Edds	Present	....
MCLEAN	Oscar Allen	....	Present
OHIO	(alternate)	....	....
	Paul Goode	Present	....
UNION	J. P. Welborn	....	....
WEBSTER			
THIRD DISTRICT			
CALDWELL	K. L. Barnes (alternate)	Present	Present
	F. T. Linton	....	....
CHRISTIAN	Delmas Clardy	Present	Present
	Guinn Cost	Present	Present
CRITTENDEN	Loman Trover	Present	Present
HOPKINS	J. E. Cotthoff	Present	Present
LYON	R. E. Davies	Present	Present
MUHLBERG	J. C. Woodall	....	....
TODD	Elias N. Futrell	Present	....
TRIGG			
FOURTH DISTRICT			
BRECKINRIDGE	Bruce Hamilton	Present	Present
BULLITT	R. G. Thomas	Present	Present
GRAYSON	J. W. Miller	Present	....
GREEN	R. T. Routt	Present	Present
HARDIN	W. A. Litzenger	Present	Present
HART	J. T. Handley	Present	Present
LARUE	Eli J. George	....	....
MARION	George E. Clark	Present	Present
MEADE	Charles Spaulding	Present	Present
NELSON	W. R. Mann	Present	Present
TAYLOR	M. H. Skaggs	....	....
SPENCER	Dixie E. Snider	....	....
WASHINGTON			

JEFFERSON

ADAIR ALLEN

BARREN

BUTLER CUMBERLAND EDMONSON

LOGAN

METCALFE MONROE SIMPSON WARREN

ANDERSON CARROLL FRANKLIN GALLATIN GRANT HENRY OLDHAM OWEN SHELBY TRIMBLE

BOONE CAMPBELL-KENTON

BATH BOURBON BRACKEN FLEMING HARRISON MASON

NICHOLAS PENDLETON ROBERTSON SCOTT

FAYETTE

JESSAMINE WOODFORD

CLARK ESTILL JACKSON LEE

FIFTH DISTRICT

John Allen	Present	Present
L. Douglas Atherton	Present	Present
William H. Bizot	Present	Present
Benjamin D. Boone	Present	Present
McHenry S. Brewer	Present	Present
Glenn W. Bryant	Present	Present
Foster D. Coleman	Present	Present
Henry S. Collier	Present	Present
W. Burford Davis	Present	Present
Robert S. Dyer	Present	Present
J. Thomas Giannini	Present	Present
Thomas V. Gudex	Present	Present
Blaine Lewis	Present	Present
Robert Lich	....	....
Robert C. Long	Present	Present
Thomas M. Marshall	....	....
Homer B. Martin	Present	Present
Roy H. Moore, Jr.	Present	Present
Robert F. Monroe	Present	Present
E. N. Rush	Present	Present
(alternate)	....	....
L. H. Segerberg	Present	Present
George A. Sehlinger	Present	Present
Houston W. Shaw	Present	Present
John M. Townsend	Present	Present
U. R. Ulferts	Present	Present
Rudy F. Vogt	Present	Present
Carroll L. Witten	Present	Present

SIXTH DISTRICT

George O. Nell	Present	....
Francis J. Halcomb, Jr.	....	....
John W. Meredith (alternate)	....	Present
John Dickinson	Present	Present
Clifton G. Follis	....	....
D. G. Miller	Present	Present

S. E. Farmer (alternate)	Present	Present
M. B. Wilkes	....	....
C. V. Dodson (alternate)	Present	....
W. R. Byrne	....	....
E. S. Dunham	Present	Present
J. Jack Martin	....	....
L. F. Beasley	Present	Present
J. T. Gilbert	Present	Present
Harold Keen	Present	Present

SEVENTH DISTRICT

Boyd Caudill	Present	....
Hugh Williams	....	....
Joseph Liebman	Present	Present
George Harris	Present	....
Claude C. Waldrop	Present	Present
W. P. McKee	Present	Present
H. Burl Mack	Present	Present
M. D. Klein	Present	Present
Carl Cooper, Jr.	Present	....

EIGHTH DISTRICT

G. L. Rouse	Present	Present
C. W. Air	Present	Present
J. L. Cassidy	....	....
W. R. Houston (alternate)	Present	Present
C. W. Kumpe	Present	Present
J. J. Rolf	Present	Present
Marc Reardon	....	....
G. R. Tanner (alternate)	Present	Present

NINTH DISTRICT

William Johnson	....	....
Jesse Smith	....	....
C. A. Marquardt	....	....
R. W. Fidler	....	....
J. P. Wyles	Present	Present
M. B. Denham (alternate)	Present	....
C. C. Prindle	....	....
B. F. Reynolds	....	....
R. L. McKenney	....	....
Perry Overby	....	....
H. G. Wells	Present	Present

TENTH DISTRICT

T. L. Adams	Present	Present
R. C. Blount	Present	Present
N. L. Bosworth	Present	Present
T. R. Bryant	Present	Present
Carl Fortune	Present	Present
R. G. Elliott	Present	Present
C. C. Johnston	Present	Present
John W. Scott	Present	Present
J. S. Williams	Present	Present
F. D. Willey	....	....

ELEVENTH DISTRICT

Johnny G. Reynolds	Present	....
S. G. Marcum	....	....
E. J. Broadus	....	....

*The information contained in the Roll Call was taken from Attendance record cards signed by delegates prior to the meetings on Sept. 16-18.

**Previously counted as Speaker of the House

County	Delegate	First Session	Second Session
MADISON	Douglas Jenkins	Present	Present
MENIFEE	Hubert Jones	Present	Present
MONTGOMERY	D. L. Graves	Present	Present
	Frank Sewell		
	(alternate)	Present	....
OWSLEY	J. M. Bush	....	Present
POWELL	Caleb Chu	Present	Present
WOLFE			
TWELFTH DISTRICT			
BOYLE	Chris Jackson	Present	....
CASEY	Kearney Adams	....	....
CLINTON	E. A. Barnes	....	....
GARRARD	Paul Sides	Present	Present
LINCOLN	James Blackerby		
	(alternate)	Present	Present
	H. I. Frisby	....	....
McCREARY	Earl Williams	....	....
MERCER	T. O. Meredith	Present	Present
PULASKI	Arthur Cooper	Present	Present
ROCKCASTLE	J. W. Walker	....	....
RUSSELL			
WAYNE	John W. Simmons	Present	Present
THIRTEENTH DISTRICT			
BOYD	W. V. Lyon	Present	Present
	H. E. Martin	Present	....
CARTER	J. Watts Stovall	Present	Present
ELLIOTT	John F. Greene	Present	....
GREENUP	Billy Joe Riddle	Present	Present
LAWRENCE	Forest F. Shely	Present	Present
LEWIS			
MORGAN	Alec Spencer	Present	....
ROWAN	E. D. Blair	Present	Present
FOURTEENTH DISTRICT			
BREATHITT	Russell L. Hall	Present	Present
FLOYD	James Archer	Present	Present
JOHNSON	M. F. Kelley	Present	Present
KNOTT	E. G. Skaggs	Present	Present
LETCHER	Lloyd N. Hall	....	....
MAGOFFIN			
MARTIN	Cordell H. Williams	Present	Present
PERRY	W. C. Hambley	Present	Present
PIKE	A. D. Osborne	....	....
FIFTEENTH DISTRICT			
BELL	David C. Asher	Present	Present
CLAY	W. E. Becknell	Present	Present
HARLAN	P. J. Begley	Present	Present
	E. M. Howard	Present	Present
KNOX	T. R. Davies	Present	Present
LAUREL	E. C. Seeley	Present	Present
LESLIE			
WHITLEY	Keith P. Smith	Present	Present
TOTAL		121	132

Nominating Committee Elected

Announcement of the election of a five-man nominating committee for 1958 by the House of Delegates was made by Clyde Sparks, M. D., Ashland, Speaker of the House.

Members of the committee, selected by ballot from a list of ten at the final session of the House on September 18, are: James W. Archer, M. D., Paintsville; Joe M. Bush, M. D., Mt. Sterling; Howell Davis, M. D., Owensboro; W. V. Lyon, M. D., Ashland; and Carroll Witten, M. D., Louisville. A chairman of the committee will be selected at an organization meeting held during the County Society Officers' Conference, March 27, 1958.

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KSARN Holds Annual Sessions October 16-18

Prominent local and national speakers addressed sessions of the Kentucky State Association of Registered Nurses Annual Meeting in Louisville on October 16-18, which were attended by 740 registered and student nurses.

KSMA president Edward B. Mersch, M. D., Covington, represented the Association at the KSARN luncheon.

Dr. G. Herbert True, assistant professor of marketing at the University of Notre Dame, and Miss Julia C. Thompson, Washington, assistant executive secretary of the American Nurses Association, were among the featured speakers.

Following the meeting, Lola Bell Akin, Paintsville, who will continue as KSARN president, announced the election of the following officers: Mrs. Marjorie B. Glaser, clinical co-ordinator of Nazareth School of Nursing, first vice president; Mrs. Apolonia Gavirati, Hopkinsville, second vice president; Mrs. Elizabeth Sams Moore, Lexington, secretary; and Mrs. Arnetta T. Dunn, Owensboro, and Mrs. Regina L. Smith, Pineville, directors.

College of Surgeons Installs Officers for '57 - '58

William L. Estes, M.D., Bethlehem, Pennsylvania, was installed as 1957-58 president of the American College of Surgeons, to succeed Daniel C. Elkin, M.D., Lancaster, at the College's Clinical Congress in Atlantic City on October 18.

R. Arnold Griswold, M.D., Louisville, was installed as second vice president at the ceremonies that night.

Fellowship in the College was conferred by Doctor Elkin who initiated 19 fellow Kentuckians as Fellows of the College. Physicians who became Fellows include: Marion G. Brown, Carl M. Friesen, Lloyd O. Larsen, Walker P. Mayo, D. Maurice Royalty, and Richard R. Segnitz, all of Lexington; Irvin Bensman, Merrill W. Schell, and Robert W. Smith, all of Owensboro; Douglas H. Jenkins, Richmond; and McHenry S. Brewer, Bourbon Ellis, Douglas M. Haynes, John A. Hemmer, David W. Kinnaird, John H. Mahaffey, Herman R. Moore, William T. Ramage, and Richard C. Spear, all of Louisville.

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Vitamin B ₁₂	25 mcgm.	(INCREMIN Drops contain 1% alcohol)	
Thiamine (B ₁)	10 mg.		

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In Memoriam

J. M. BLADES, M.D.
Butler
1880-1957

J. M. Blades, M. D., a former KSMA Councilor, died at St. Luke Hospital in Ft. Thomas following a long illness on October 4.

A former mayor of Butler and one time president of its Board of Education, Doctor Blades was also a past president of the Licking Valley Medical Society. Doctor Blades, who was a native of Powersville, graduated from the Louisville Medical College in 1904. He practiced in California, Ky., before coming to Butler.

ASA PORTER TAYLOR, M.D.
Lexington
1881-1957

Asa Porter Taylor, M. D., died at Central Baptist Hospital in Lexington on September 16 after several months of illness.

A native of Owen County, he started practicing medicine in Lexington with his father, Asa P. Taylor, M. D., after completing his medical training in Louisville in 1903. He was widely known for his charities, especially for his aid to student nurses.

ELLIS M. BOND, M.D.
Greenup
1902-1957

Ellis M. Bond, M. D., died of a heart attack at his home in Greenup after three weeks of illness on October 3.

A native of Georgia, Doctor Bond, who had formerly practiced in Louisville, had been in practice in Greenup for the past four years. He received his medical degree from the University of Georgia in Emory in 1925.

EUGENE HYDEN, M.D.
Paris
1903-1957

Eugene Hyden, M. D., died in a Lexington Hospital on October 12 after a lengthy illness.

The 54-year-old physician had practiced in Paris for the past 20 years. Doctor Hyden graduated from the University of Louisville School of Medicine in 1930.

J. R. CRITTENDEN
Gordonsville
1869-1957

J. R. Crittenden, 88, one of Kentucky's oldest physicians, died at his home in Gordonsville on September 26.

Doctor Crittenden, who graduated from the University of Nashville Medical Department in 1894, had been sick for about a week before his death. Up to that time he had been active.

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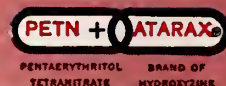
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CARTRAX should be taken *before* meals, on a *continuous* dosage schedule. Use with caution in glaucoma.

1. Russek, H. I.: J. Am. Geriat. Soc. 4:877 (Sept.) 1956.

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plus	
Prophepyridamine Maleate	12.5 mg.
Phenylephrine Hydrochloride	10.0 mg.

Dr. Sprague Named Director

John S. Sprague, M. D., who has served on the health service staff of the University of Kentucky part-time for the past eleven years, has been named acting director of the University of Kentucky's Student Health Service.

Doctor Sprague, who is a past secretary and president of the Fayette County Medical Society, was appointed to succeed John S. Chambers, M. D., who has headed the service since 1928, according to an announcement by William R. Willard, M. D., vice-president of the medical center. Doctor Chambers will remain on the staff.

NEWS ITEMS

Freeman P. Fountain, M. D., has opened an office in Louisville for the practice of physical medicine and rehabilitation. Since 1956, Doctor Fountain, a graduate of the University of Colorado in 1951, has been an assistant professor of physical medicine at the University of Louisville. He interned at Fitzsimmons Army Hospital in Denver.

Paul H. Klingenberg, M. D., has opened an office in Covington where he will limit his practice to surgery. A native of Covington, he graduated from St. Louis University Medical School in 1957, interned at St. Elizabeth Hospital in Covington and received his surgical training at the Veterans Administration Hospital in Dayton, Ohio.

W. B. Hilburn, M. D., who graduated from the University of Louisville School of Medicine in 1956, has opened an office in Jamestown for the General Practice of Medicine. Doctor Hilburn took his internship at Baptist Memorial Hospital in Memphis, Tennessee.

William P. Grise, M. D., is now practicing medicine and surgery at the Floyd Clinic in Richmond. A graduate of the University of Louisville Medical School in 1953, Doctor Grise interned and took his residency training at the Good Samaritan Hospital in Lexington. He served as a captain in the U. S. Air Force from September, 1955 to September, 1957.

L. C. McCampbell, M. D., a 1950 graduate of the University of Cincinnati Medical School, has joined the staff of the Elizabethtown Clinic. Doctor McCampbell, who will limit his practice to obstetrics and gynecology, interned at the University of Wisconsin General Hospital and did general practice the following three years at Sylva, North Carolina. He received specialty training at Bethesda Hospital, Cincinnati.

Charles D. Feuss, Jr., M. D., a native of Covington who has previously served three years as superintendent of Eastern State Hospital, Lexington, has been appointed superintendent of Longview Hospital, Cincinnati, effective in mid-December. At present, Doctor Feuss, a graduate of the Vanderbilt University Medical School, is director of the Milwaukee County Hospital for Mental Health.

A. A. Shaper, M. D., Louisville, has been promoted to the rank of Captain in the Medical Corps of the U. S. Naval Reserve.

If Tourney Winners Announced by Committee Chairman

Three top winners in the annual Kentucky State Golf Association Tournament at the Standard Country Club on September 17, 18, and 19 have been announced by Robert C. Long, M.D., Louisville, chairman of the KSMA golf committee.

Paul B. Hall, M.D., Paintsville, is the recipient of the Over 55 Trophy, Norman Hasler, M.D., Waverly Sanatorium, copped low gross prize, and Sam A. Street, M.D., Louisville, qualified for low net play.

Winners of daily prizes for low gross scores were: Monday, Martin Z. Kaplan, M.D., Louisville; Wednesday, Norman Hasler, M.D., and Thursday, Paul Hall, M.D., Paintsville.

Dr. Gaines to Head Psychiatrists

Dr. W. K. Gaines, Jr., M.D., Louisville, who was elected president of the Kentucky Psychiatric Association meeting held during the KSMA Annual Meeting on September 18, will take over as president on September 15.

He will replace James Lowrey, M.D., formerly of the U. S. Public Health Hospital in Lexington, who was leaving the state. Doctor Lowrey was elected president at the September meeting. Secretary-treasurer of the group is H. Logan Gragg, M.D., Junction City.

Barrow Reserve Center Dedicated

The David Barrow Army Reserve Training Center, named in memory of the late Lieutenant Colonel David Barrow who organized and commanded Base Hospital 40—the Barrow Unit—during World War I was dedicated in Lexington September 22.

Doctor Barrow's unit, made up almost entirely of Kentuckians, served in England. Twenty-two of its members attended the ceremony. Featured speaker was Lt. Gen. Charles E. Hart, commanding general of the Second Army.

Muldraugh Hill Society to Meet

The Muldraugh Hill Medical Society will meet at St. Anthony's Hospital in Louisville on Thursday, December 12 from 10 a.m. to 4 p.m., according to an announcement by Joseph C. Ray, M. D., Louisville, Society secretary.

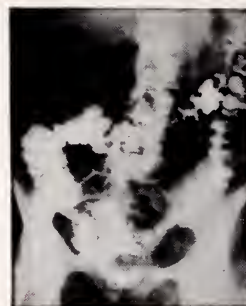
Although the program plans were incomplete as the Journal went to press, three speakers were scheduled to give papers and a 20 minute film showing was planned. The following will present papers at the meeting: Charles Roser, M. D., Louisville, "Low Basal Metabolism and Related Ear, Nose and Throat Symptoms"; Harold L. McPheeters, M. D., Louisville, "The Private Physicians Role in the Department of Mental Health." Lt. Colonel Edward J. Fadell, Fort Knox, will give a paper entitled "The Diagnostic Value of Liver Biopsy" which was originally scheduled for presentation at the August meeting.

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Associate Director

Dr. Hancock on New AMA Group

J. Duffy Hancock, M. D., Louisville, has been appointed by the AMA as a member of a special committee to study proposals introduced at the last session of Congress for hospitalization of the aged under Social Security Funds.

Other members of the special "task force" appointed by the AMA Board's Executive Committee are: George M. Fister, M. D., Ogden, Utah, chairman; Frank C. Coleman, M. D., Des Moines; Robert L. Novy, M. D., Detroit; and George Gsell, M. D., Wichita. They will supervise research to gather information on the problem of hospitalization of persons over 65 years of age, an AMA announcement said.

Mrs. Canary Given Health Award

Mrs. J. E. Canary, Owensboro, was awarded the KSMA Woman's Auxiliary health-citation award at its Annual Meeting on September 18. Inaugurated last year, the award honors a non-member of the auxiliary who has given outstanding service to the community in the field of health.

As health chairman of the Owensboro Woman's Club, Mrs. Canary helped to establish a mental health program in Owensboro, promoted the Health-Council—Town Hall meetings to improve sanitary conditions in the town, and sponsored Health Sunday drives for TB, polio and cancer.

College of Surgeons to Meet

Two Louisville physicians, Rudolf Noer and Hugh Lynn, will present papers at the Sectional Meeting of the American College of Surgeons at the Hotel Heidelberg in Jackson, Mississippi on January 16-18.

Doctor Noer, who will make two appearances at the meeting, will participate in a symposium on "Management of Multiple Injuries" on Friday, January 17. His topic will be "Treatment of Acute Chest Injuries." On the final day of the meeting, he will discuss "Present Day Concepts in the Treatment of Intestinal Obstruction." Doctor Lynn will talk on "Teratomas in Children" as a member of a Symposium on Pediatric Surgery on January 18.

Dr. Schramm Named Acting Director

Theodore A. Schramm, M. D., has been named Acting Director of the Community Services Division of the Kentucky Department of Mental Health, according to an announcement by H. L. McPheeters, M. D., Commissioner of Mental Health.

Doctor Schramm, a graduate of the University of Louisville School of Medicine in 1953, recently completed three years of residency training in psychiatry under the direction of the U of L Department of Psychiatry, spending one year at Central State Hospital, Lakeland, as staff psychiatrist. In his new capacity he will coordinate all activities of the Division.

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A woman with dark hair, wearing a white long-sleeved shirt and dark, paint-splattered pants, is standing on a wooden step ladder. She is holding a paintbrush in her right hand and painting the ceiling. Her left arm is extended outwards. A light bulb hangs from the ceiling. In the background, there is a doorway and a window with a plant. On the floor, there is a white bucket with a 'T' on it, a paintbrush, and some paint. The overall color palette is dominated by yellow and white, with dark accents from the woman's pants and the ladder.

Mom “wears
the pants”
once too
often

frozen shoulder

Bursitis and tenosynovitis are new terms to homemakers, but they are not uncommon sequels to overexertion. Early antirheumatic therapy is to be encouraged in the treatment of these conditions, as it is in more serious rheumatic conditions, to alleviate pain and prevent progression of the disorder. With adequate therapy the prognosis of bursitis in its acute stage is good. Delaying therapy may result in extension of the inflammation and gross anatomical changes that tend to incapacitate the patient.

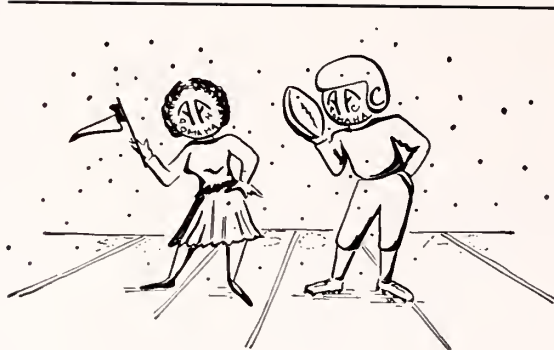
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This substantial decline was attributed in major part to Salk vaccine, licensed on April 12, 1955.

EDITORIAL

(Continued from page 1017)

toxic diffuse goiter that surgical operation is preferable to radioactive iodine.

Where there is nodularity upon clinical examination, removal by surgical operation is the best treatment. The operation should be preceded by a suitable and adequate preparation with one or more of the so-called antithyroid drugs.

The treatments outlined above are so satisfactory that we no longer advise treatment for permanent control of toxicity with the antithyroid drugs which are uncertain in response and when successful require a prolonged course of observation and medication.

Malcom Thompson, M.D.

Blaine Lewis, M.D.

IN THE BOOKS

(Continued from page 960)

Here are found no morphologic or etiologic descriptions—only formulae. However, there is an excellent index for the physician who has established the dermatologic diagnosis in his patient. In it he can find a great deal of help for the treatment of the specific dermatosis under consideration.

The main portion of the book is logically divided into Sections, viz: 1. Topical Remedies; 2. Systemic therapy; 3. Articles for clinical Use; 4. Therapeutic Aids.

The first two sections include virtually all the accepted, up-to-date modalities and drugs in the dermatologist's armamentarium.

The third, short but adequate, section lists those drugs, dressings, and other material used primarily in an outpatient department (but also found in most skin specialists' offices).

The final section includes concise, well-phrased, instructions that can be printed and given to patients having such common conditions as acne, impetigo, scabies, etc.

For the practitioner who is interested in successfully handling his own dermatological problems, this formulary should prove of inestimable value. For the trained dermatologist, this formulary should provide a fine review of modern therapy.

Since this is the second edition of this book in four years, it is to be hoped that with as frequent revisions in the future that his excellent summary of treatment may be constantly kept up-to-date.

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NEWS ITEMS

Thomas I. Campbell, M. D., Lebanon, was feted at a dinner given by the staff of Mary Immaculate Hospital, to celebrate his fiftieth year of practice in Lebanon and Marion County. Eighteen physicians and four dentists from Marion and Washington counties were in attendance. Doctor Campbell turned over a fifty dollar gift from the hospital staff to the Crusade for Children.

John D. Porterfield, M. D., who has been assistant surgeon general, has been named deputy surgeon general and second in command of the U. S. Public Health Service. Doctor Porterfield has been in the Public Health Service since 1939 and was once stationed in Lexington at the U. S. Public Health Hospital there.

David S. Colvin, M. D., a native of Paducah, has been appointed Health Officer of Meade and Hardin counties to succeed Patricia K. Conlan, M. D., who resigned to accept a position in the State Health Department as epidemiologist. Doctor Colvin received his M. D. degree from the University of Louisville Medical School in 1956, and recently completed his internship at Mercy Hospital, Springfield, Ohio.

PUBLIC HEALTH

(Continued from page 972)

to know more about the special risks which confront these infants. Hospitals, too, could help by keeping accurate records and by eliminating the pernicious practice of judging infants "viable" or "non-viable" on the basis of weight alone. Some hospitals do not even calculate mortality figures for infants weighing less than 1,000 grams. While this may make their over-all infant mortality figures look good it contributes little to our knowledge of survival in these infants. A look at the figures in Table 1 will indicate that it is not a justifiable procedure, since a high mortality is expected in this group.

(3) Improved training of physicians and nurses in caring for premature infants. Many nurses and physicians have not had the benefit of specialized training in care of the premature and newborn infant. Since it is recognized that this type of care is essential to the survival of these infants there is a need for the establishment of training centers where this experience can be obtained.

(4) Need for improvement of hospitals' facilities for caring for these infants. Standards of care have been outlined in a book entitled "Hospital Care of Newborn Infants," prepared and distributed by the American Academy of Pediatrics.

A resolution favoring the development, by the State Health Department, of a premature center, was passed by the House of Delegates of the Kentucky State Medical Association at its last meeting in September. The Health Department hopes to obtain funds to establish such a center to be used for training of professional personnel. Another outgrowth of such a center would be the development of a Hospital Consultation team, consisting of a physician and nurse, who would be available for consultation to individual hospitals concerning the improvement of the methods of care for the premature and newborn infant.

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An editorial in the Journal of the American Medical Association states that sulfonamides are successful in 90 per cent of urinary tract infections, and "... should be tried first."² There are many properties a sulfonamide should possess before it can be claimed to be efficacious and safe. "Thiosulfil,"[®] brand of sulfamethizole, is considered to be one of the "... most acceptable sulfonamides for treatment of urinary tract infections ..."³

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"Thiosulfil" is rapidly absorbed and excreted, achieving high antibacterial levels in the urine and throughout infected tissue, with negligible penetration into red blood cells.

High Solubility

"Thiosulfil," in both the active and acetylated forms, is highly soluble in urine over a wide pH range, thus permitting effective action with minimal side effects. Alkalini-

zation is not required; fluids may be restricted rather than forced.

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"Thiosulfil" is virtually unacetylated. As much as 90-95 per cent remains in the free therapeutically active form. Virtually all of a given dose is therefore available for antibacterial action.

In a long-term clinical study, patients with incurable chronic urinary infections were kept symptom free for as long as five or six years on a maintenance dose of one or two tablets of "Thiosulfil" daily.⁴ In another evaluation, 20 patients were given 25-100 grams of "Thiosulfil" over a period of 20-90 days without incidence of side reactions.⁵ Goodhope⁶ reports that during 30 months of clinical use with "Thiosulfil," no evidence occurred of exanthemata, urticaria, emesis, fever, hematuria and crystalluria.

Recommended Dosages: 0.5 Gm. four times daily. The pediatric dosage is 30 to 45 mg. daily per pound of body weight. If voiding occurs during the night, an extra half-dose should be given. Fluids may be restricted rather than forced.

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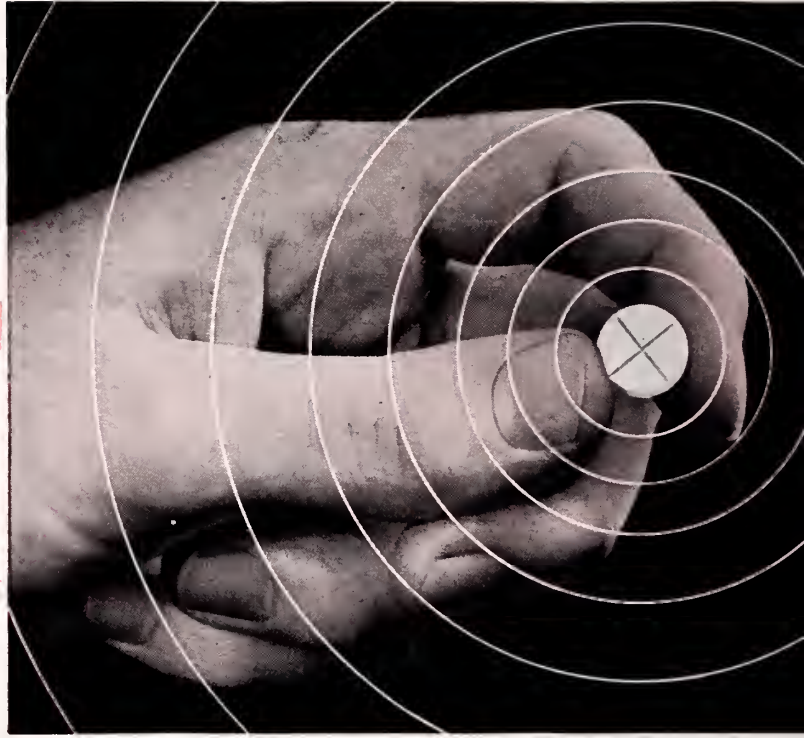
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(1) Asung, C. L.; Charcowa, A. I., and Villa, A. P.: Sea View Hosp. Bull. 16:80, 1956. (2) Asung, C. L.; Charcowa, A. I., and Villa, A. P.: New York J. Med. 57:1911 (June 1) 1957. (3) Report on Field Screening of Nostyn by 99 Physicians in 1,000 Patients, June, 1956.



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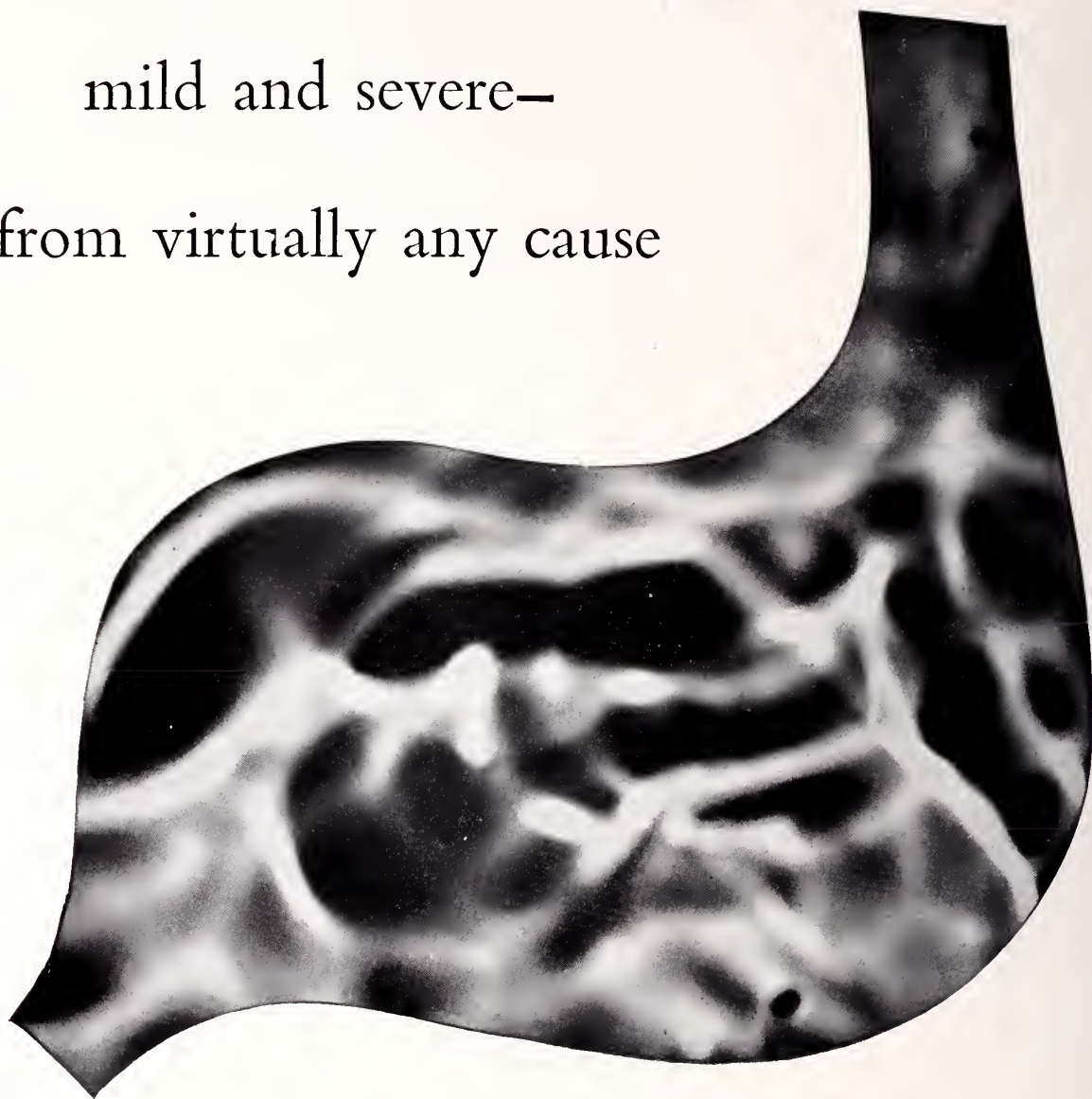
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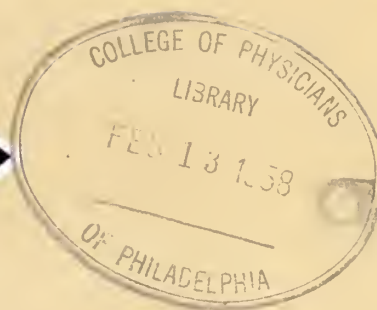
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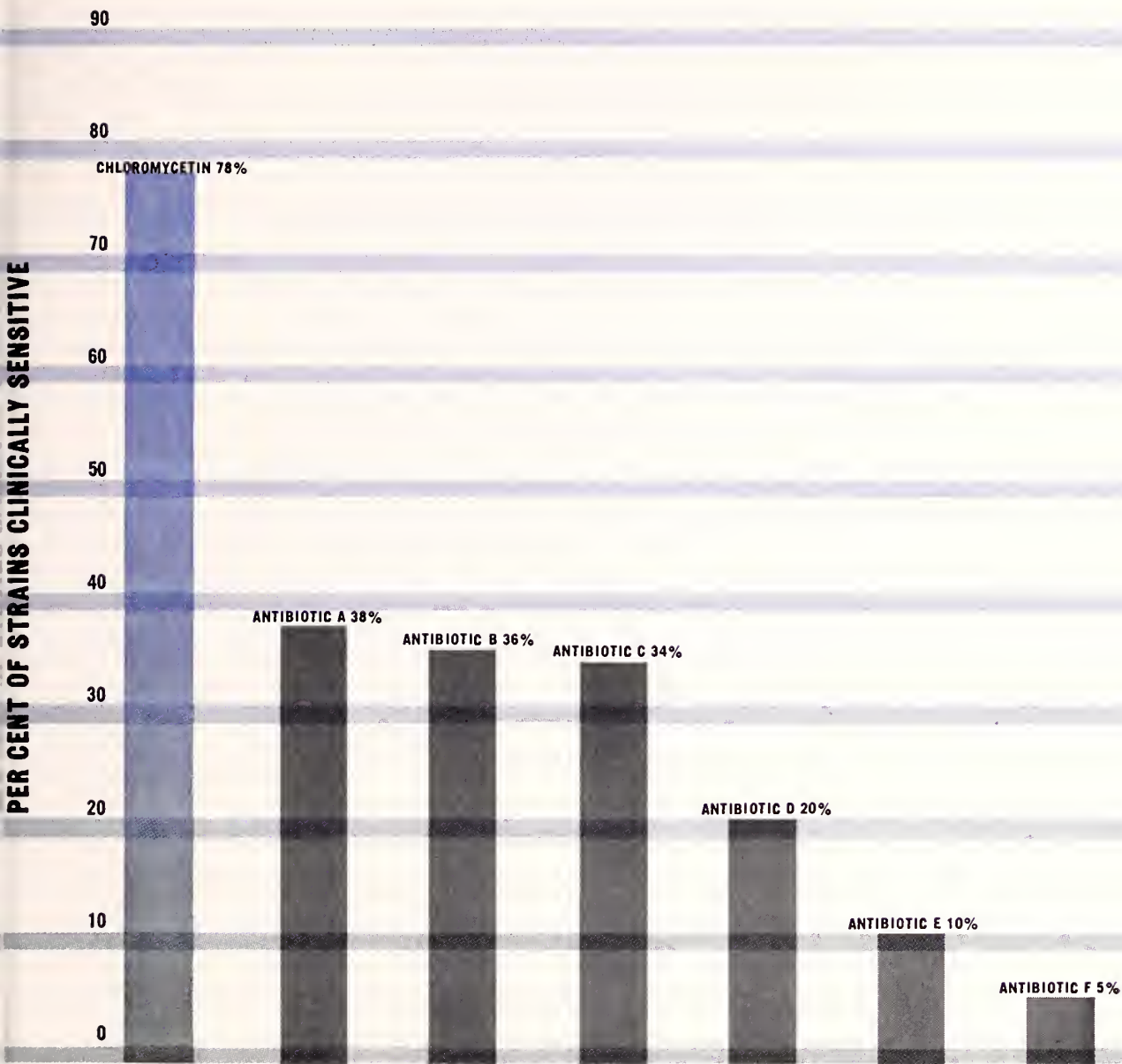
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- (1) Petersdorf, R. G.; Bennett, I. L., Jr., & Rose, M. C.: *Bull. Johns Hopkins Hosp.* 100:1, 1957. (2) Yow, E. M.: *GP* 15:102, 1957. (3) Altemeier, W. A., in Welch, H., and Marti-Ibanez, F., ed.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 629. (4) Kempe, C. H.: *California Med.* 84:242, 1956. (5) Spink, W. W.: *Ann. New York Acad. Sc.* 65:175, 1956. (6) Rantz, L. A., & Rantz, H. H.: *Arch. Int. Med.* 97:694, 1956. (7) Wise, R. I.; Cranny, C., & Spink, W. W.: *Am. J. Med.* 20:176, 1956. (8) Smith, R. T.; Platou, E. S., & Good, R. A.: *Pediatrics* 17:549, 1956. (9) Royer, A.: Scientific Exhibit, 89th Ann. Conv. Canad. M. A., Quebec City, Quebec, June 11-15, 1956. (10) Bennett, I. L., Jr.: *West Virginia M. J.* 53:55, 1957. (11) Altemeier, W. A.: *Postgrad. Med.* 20:319, 1956. (12) Felix, N. S.: *Pediat. Clin. North America* 3:317, 1956. (13) Metzger, W. L., & Jenkins, C. J., Jr.: *Pediatrics* 18:929, 1956. (14) Woolington, S. S.; Adler, S. J., & Bower, A. G., in Welch, H., and Marti-Ibanez, F., ed.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 365. (15) Waisbren, B. A., & Strelitzer, C. L.: *Arch. Int. Med.* 99:744, 1957.



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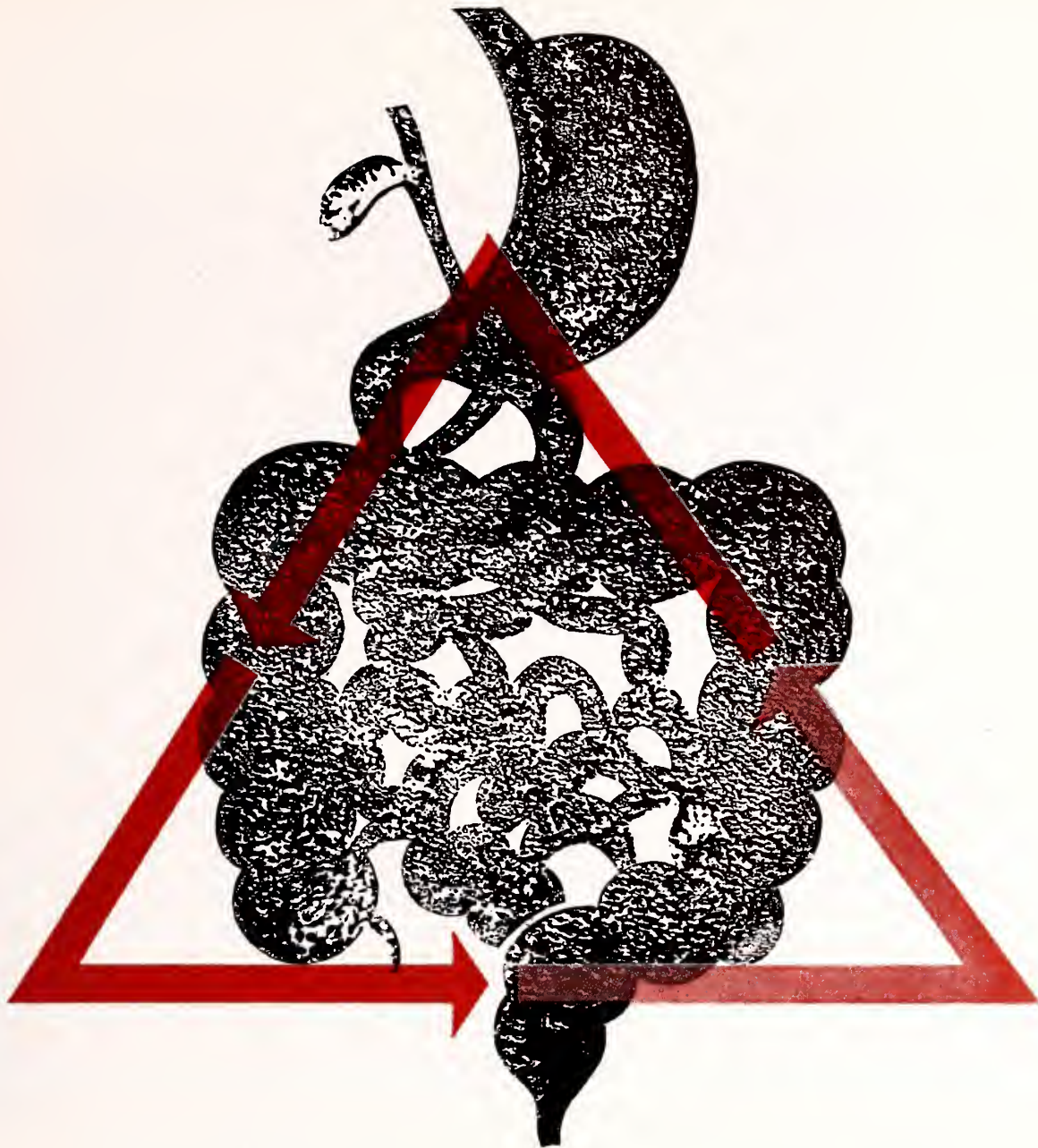
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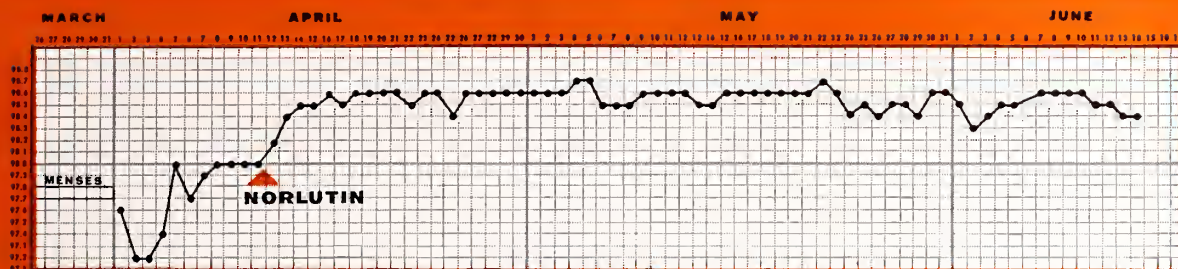
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**message
from
the
President**

Socialism

For the past 25 years the United States has been drifting toward Socialism. Perhaps drifting is not the correct word. If we but study the trends and reappraise the past actions in the last quarter of a century, it becomes more apparent that we are not drifting, but are being led slowly and surely into the realm of Marxism. The planners in our own government are seeing to it that we steer the "Ship of State" to Socialism. They, together with the international groups work hand in hand to supplant the American way of life with a philosophy that is foreign to Americanism.

These groups have long been foisting world government under the guise of peace. They are slowly tearing down the walls of nationalism. We are led to believe that the only way of life is through international cooperation and management. Our children are being infused with this type of thinking. These international embellishments are the baubles dangled before us to hide the real issue. This imbuing process is continual and progressive.

What is behind all of this? The various movements, the New Deal, the Fair Deal, the Liberals, the Progressive and the kindred other philosophies carefully follow a set pattern. This pattern has but one direction, and all its roads lead to one goal—socialism, and socialism is but one step from communism. This does not mean to infer that all the men associated with these various movements are either socialists or communists. Probably a large portion of the proponents of these philosophies are merely the dupes of the social planners, who are subtly trying to convert the world to socialism.

Communism wants the State to own everything. Socialism would have the State own not everything, but only capital or those forms of wealth which are used for income; these include the instruments of production such as land, mines, machinery, etc; and of distribution constituting railroads, airlines, steamships, factories, insurance companies and all financial institutions. Socialism is therefore a mitigated form of communism. Its economic aims of necessity entail a political program. The State is to become the sole owner and administrator of all the means of production and distribution. This is to be accomplished by the political means of the ballot box and legislation. The anarchists and communists accomplish this through force, violence and controlled elections. Socialism and communism must of necessity gain control of labor. The larger the unions with their centralized power, the easier for control, and the more readily can these groups be transferred to direct governmental control and all the contingent abuses.

In general, Socialism may be defined as a politico-economic system which, when the ownership of all wealth has been invested in civil society, gives to this society the exclusive control over its production and distribution. The individual then exists for the State, and not the State for the individual.

Marxism is the accepted Socialist philosophy. It means materialistic evolution, and as applied to the social body, "the materialistic conception of history," as stated by Fredrick Engels, a collaborator of Marx. "The final causes of all social changes and political revolutions are to be sought, not in men's brains, not in men's better insight into eternal truth and justice, but in the changes occurring in the modes of production and exchange. They are to be sought not in the philosophy, but in the economics of each epoch."

These principles exclude the concept of man as a free human being. He is part of a State, a slave for the State. Socialistic ethics are purely and simply ones of materialistic evolution, which in any form is a negation of morality, and whose action is one of social expedience.

We are being told that social evolution has reached a point when a radical readjustment of ideas must be made in order to fit in with the economic order. This socialistic norm dovetails with the propaganda of the United Nations, the International Labor Organizations,

the World Health Organizations and closely is followed by various departments within our own government in these United States. These international groups are constantly trying to pass treaties or covenants which will become binding and supercede our own constitution. Remember these treaties are ratified by two-thirds of the senate present. This could mean that as few as two senators can commit the United States to a treaty which might be wholly or in part socialistic.

Under Socialism, the worker is constantly and directly dependent upon the State—from the “Cradle to the Grave.” And with a few minor changes in Socialism or Communism, the “citizen of the state” could be dependent for his existence, even before his birth, on the fancies of the ruling clique. He would be a hired man of the State throughout his life, and could become contented with this degenerate State only after he had lost all initiative, self respect, and ambition that are essential to our efficient and worthy existence. He either works for the State or starves. He buys from the State what the State sees fit to produce or sell. He is denied

all liberty of choice. This can only lead to chaos and ruin in the end.

Socialism would create bureau on top of bureau, laws on laws, and create more waste on an already wasteful system. It would deprive the individual and the family of their natural right to private property.

The right to own property is held by natural right, and is not derived from the State—since the individual and the family existed prior to the State—and it is therefore a right which the State may not take away without doing grave injustice to the possessor.

From whatever point of view Socialism is considered, its utopian character is apparent. It's a philosophy of dreamers, planners and non-contents. It is vain and futile as a means of bettering the economic condition of the masses, unsound in principle, unjust in method, and impossible of execution. It would cause a chaotic and miserable society. Religion plays no part in Socialism. When religion is gone we have Communism.

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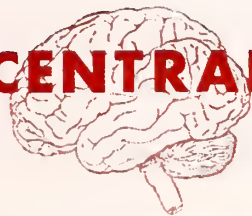
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WASHINGTON NEWS DIGEST



Washington, D.C.—Just how much money does the federal government spend on health programs and just how is it spent?

The answers are not easy to come by, but each year the Washington Office of the American Medical Association gathers together all of the bits and pieces of information needed to explain where and how the U.S. is involved in medicine, from cancer research to treating workmen's sniffles. Some of the material comes directly from appropriation bills, but where programs and projects are not identified there, the responsible government officials are consulted for the breakdown.

For all health and medical purposes, the U.S. during the current fiscal year is spending approximately two and one-half billion dollars. This—despite months of economy talk in the administration and in Congress earlier in the year—is about the same figure as last year.

The survey also unearthed some interesting side-lights that show perhaps more graphically than the dollar marks the extent to which federal medical activities are spreading among almost all agencies and departments.

At least 23 U.S. cabinet departments and independent agencies are engaged in some medical operations, and there are at least 79 separate health-medical activities worthy of listing and describing. Many of these in turn are responsible for scores and scores of individual operations.

This year the relatively new Department of Health, Education and Welfare tops the list of all departments in health-medical spending with \$849,394,800, bounding past Veterans Administration and Defense Department, which up to now have been at the head of the column. VA is spending \$849,374,000, within \$20,000 of HEW, but Defense Department this year drops back more than \$80 million, to \$702,000,000, largely because the decreasing size of the armed forces means fewer uniformed men and dependents to care for.

Next comes Atomic Energy Commission, but its medical spending of \$40 million—mostly for research—is far down the column from the Big Three.

International Cooperation Administration has \$37 million to help our friends overseas to raise their medical standards. The other 19 departments and agencies have substantially less, the last item being the \$12,145 allocated to the physician entrusted with keeping members of Congress as healthy as possible.

For the first time the AMA report compiles information on the programs in which the U.S. participates for payments because of disability. Among those receiving these payments are veterans, disabled

beneficiaries under social security, disabled railroad workers, etc.

Because this money is not all federal and comes from several tax sources—OASI and railroad payroll deductions as well as general U.S. revenue—it is not added to other federal medical costs in the AMA study. For the current fiscal year the total of these "payments for disability" is about \$3.2 billion.

NOTES:

Federal Trade Commission and Food and Drug Administration joined together to warn drug manufacturers against using "false and misleading claims" to promote drug products for use against Asian influenza. It was pointed out that vaccine is the only protection, and that a physician is needed if there are complications.

* * *

Meeting at the invitation of the Children's Bureau, a group of specialists in the health fields discussed use of X-rays of the newborn and pregnant women and concluded that restraint must be exercised.

* * *

There has been remarkable progress in the last five years in the fight against tuberculosis, but there are still at least 250,000 active cases in the United States. This is the gist of a special nationwide survey by Public Health Service and the National Tuberculosis Association.

* * *

While visiting Russian women scientists were telling of a 25-cent drug to treat Asian influenza, it was learned that some members of the Russian Embassy staff in Washington had been vaccinated with American vaccine.

* * *

In a major address, President Eisenhower pleaded for more private financial aid to medical colleges and warned against the dangers of federal controls in this field.

* * *

When asked his opinion on legislation for the hospitalization of the aged under social security, Secretary Folsom warned against the tax increase that would have to accompany the plan, possibly a suggestion that the administration will oppose the idea next year as it did last.

* * *

Reversing a previous policy, the Internal Revenue Service now says it is possible for a group of doctors to practice as an "association," thereby qualifying for approximately the same tax benefits they would receive under the proposed Jenkins-Keogh law.



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Urticaria and angioneurotic edema	3	1	1	1		Dizzy (1)
Allergic dermatitis	2		1	1		Slight Drowsiness (2)
Bronchial asthma	1		1			
Pruritus	1		1			
Total	37	15	13	7	2	Drowsiness (5) 16.2% Dizzy (1)

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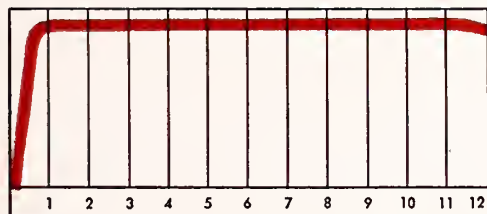
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PUBLIC HEALTH PAGE



ASIAN INFLUENZA STRIKES KENTUCKY

RUSSELL E. TEAGUE, M.D.

Commissioner of Health
Commonwealth of Kentucky

AFTER several weeks of expectancy, influenza hit Kentucky early in October.

Trigg County was the first to report a large number of cases and the temporary closing of schools for economic reasons. Since the state had been well seeded by sporadic cases since July, it was anticipated that this was the beginning of a widespread outbreak of influenza. That same week, the number of cases reported reached 2,444, as compared to 570 cases for the previous week. Inasmuch as we had 79 cases of the Asian variety confirmed by laboratory examination since the initial outbreak in July, it was assumed that the majority of the cases were due to this particular strain.

The following week there were numerous reports from various counties on the closing of schools and a marked increase in the number of absentee teachers, as well as pupils. There were 35 or more laboratory confirmations of illness from the Asian strain of virus, and the number of reported cases reached 30,018. The majority of these cases occurred in 28 counties which were catalogued as experiencing an epidemic of influenza. This was the situation for the week ending October 19, 1957.

The week ending October 26, 1957 witnessed an intensification of the spread of the disease, with 35 positive laboratory confirmations, more schools closed, a total of 51,437 cases, and 62 counties listed in an epidemic status.

There was a further spread of the epidemic for the week ending November 2, 1957. Thirty-two additional counties were added to our epidemic list, making a total of 94 counties in this category. There were 62,918 cases reported, with 37 cases confirmed as Asian Influenza by the laboratory. Two cases were found by the laboratory to be a different strain of the A virus, and not due to the Asian strain.

During this week, Breathitt County reported a number of cases of influenza complicated by pneumonia. Our laboratory reported a Type III pneumococcus in one case from that county. Doctors in Breathitt County have also reported a clinical complication of mesenteric adenitis in some of their cases of influenza resembling appendicitis. Three cases of pregnancy aborted in their first trimester with this complication, and one in her second trimester.

Vaccine continues to be in short supply—513,013 cc's have been shipped to Kentucky up to November 1, 1957. Notice has been received from the U. S. Public Health Service that all manufacturers will increase the effectiveness of the Asian strain vaccine from 200 CCA units (chicken cell agglutination units) to 400 CCA units. The recommended dosage for the new improved vaccine, after it becomes available, is as follows:

1. As the 400 CCA Asian strain influenza vaccine becomes generally available, it is recommended that for those who have not been vaccinated, the new vaccine be used in a single 1.0 cc. dose injected under the skin (subcutaneously), except in young children, for whom two injections between the layers of the skin (intracutaneously), are recommended, given in 0.1 cc. amounts at an interval of a week.

2. For (a) those who have already received a 0.1 cc. dose intracutaneously of the 200 CCA vaccine, and for (b) those who have received a 1.0 cc. dose subcutaneously of 200 CCA vaccine, and who are in special risk groups; namely, pregnant women, the aged, and those suffering from certain chronic ailments such as rheumatic heart disease and pulmonary illnesses, it is recommended that a second 1.0 cc. subcutaneous dose of 200 CCA vaccine or $\frac{1}{2}$ a cc. of 400 CCA vaccine be given in not less than two weeks after the first dose.

3. Physicians may wish to recommend a second injection, as well, for other patients under their care.

Vaccinations should continue to be carried out in communities where influenza has been prevalent for those who have not had the illness.

We wish to express our appreciation to all the doctors of Kentucky who have taken time out of their busy practices to report their cases of influenza, as well as other communicable diseases, to our local health departments.

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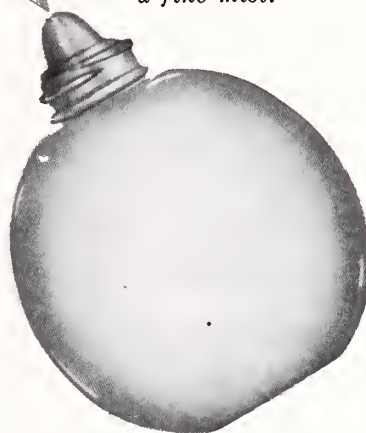
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We are grateful for your very real contributions in the interest of a better KSMA Journal in 1957—and, with your help, look forward to making our Journal more attractive, useful, and readable in the coming year.

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IN THE BOOKS



PHYSIOLOGIC PRINCIPLES OF SURGERY: by Leo M. Zimmerman, M. D., and Rachmiel Levine, M. D.; published by W. B. Saunders Company, Philadelphia and London; 948 pages; Price, \$15.

This book by Doctors Zimmerman and Levine and their forty-eight collaborators, presents the up-to-date biochemistry, physiology and endocrinology of surgical disease, in a practical way, to the resident training for his Surgical Boards as well as to the practicing surgeon. On the other hand, it should help the physiologist to correlate his animal experimentation with the diseased human. It is written in essay form, giving the essence of various pertinent experiments, tests and theories but without the complete detail of a text in physiology.

The 36 chapters cover an unusually wide field. Along with the expected topics on fluids and electrolytes, shock and hemorrhage, etc., there are numerous other interesting subjects, including:—the endocrine response to trauma; blood transfusions; factors involved in tissue transplantation; pain; anesthesia; congenital and acquired heart disease; surgery of the newborn; the basis for surgical treatment of hypertension; the kinetics of the skeletal locomotor system.

Under each organ and system, biochemistry and physiology is correlated with the normal and pathological anatomy and, with a brief outline of therapy. Each chapter ends with a complete bibliography with the full title of each reference.

Because of the numerous contributors, style and complexity of presentation varies with each chapter. Several subjects stand out especially. In their treatment of congenital heart disease the authors give much of basic hemodynamics and also present the modern developments in catheterization and angiocardiology. The chapters on pulmonary function studies, the liver, the pancreas and the locomotor system are unusually well presented and illustrated.

The only criticism one might offer of this new and informative volume is that a somewhat more liberal use of figures and diagrams might relieve more of the solid pages of the text.

JOSEPH E. HAMILTON, M.D.

TEXTBOOK OF PATHOLOGY: With Clinical Implications: by Stanley L. Robbins, M. D., published by W. B. Saunders Company, Philadelphia and London, May 8, 1957; 1351 pages, 933 illustrations, price, \$18.

One might question the need for an additional textbook of pathology unless it were to offer a fresh approach and treatment of the subject. The concept that pathology is a living, dynamic science can no longer be denied. The tremendous advancements in pathology during the past several years include not only newer and more detailed knowledge, but a change in approach, methods and application of known facts. Dr.

Robbins does, in fact, present a very dynamic approach to the science and art of pathology. His new book is directed toward the clinical application of pathology. The subject matter is treated in a very refreshing, practical manner.

The thirty-two chapters of the book are largely the work of Dr. Robbins, the few exceptions being *The Nervous System*, by Dr. J. Foley; *The Oral Cavity*, by Dr. Irving Glickman; *The Lymph Nodes and Spleen*, by Dr. Frederick Parker, Jr.; *The Liver*, by Dr. G. Kenneth Mallory; and *The Skin*, by Dr. Herbert Mescon.

Each chapter has great similarity in form, beginning with a classification of diseases affecting the particular organ under consideration. This is followed by a brief description of the normal, including embryology, gross and micro-anatomy. The physiology is then described briefly, followed in turn by the main subject matter of pathology. The latter is not limited to a description of gross and microscopic changes, but includes a great deal of clinically applicable material, such as incidence, etiology, significance and, in many instances, associated organ changes.

Usually this is followed by a description of the clinical course of the particular disease, offering the reader the opportunity of correlation. Coverage of disease is about as complete as one could expect from a general textbook of pathology.

Throughout the thirteen hundred and fifty-one pages there are ample illustrations, both gross and microscopic. For the most part the photographs are well chosen and of extremely good quality. A bibliography appears at the end of each chapter. In most cases this is not extensive, but does contain the major original works. There is a complete index at the end of the book.

This new text was impressive enough to the reviewer for him to recommend it to his medical students. It should serve equally well for graduate medical students and practicing physicians as a general reference text.

WILLIAM M. CHRISTOPHERSEN, M. D.

ANNALS OF THE NEW YORK ACADEMY OF SCIENCES: Vol. 67, Article 10, Pages 671-894; "Meprobate and Other Agents Used in Mental Disturbances;" Otto v. St. White-lock, editor-in-chief; Frank M. Berger, consulting editor.

This is a treatise on tranquilizing drugs and is very detailed and technical and could only be evaluated by someone who is well versed in the field of pharmacology, chemistry and physiology. It would be impossible to indicate in this short report that which would be of value to the reader.

The book is divided into four parts: 1. Chemistry, Pharmacology, and Mode of Action of Meprobamate;

2. Treatment of Psychoneurotic Conditions; 3. Treatment of Psychiatric and Other Conditions with Meprobamate; 4. Use of Meprobamate in Muscle Spasm.

The introductory remarks are very philosophical and Harry Beckman points out very specifically that there is still much investigation needed on the deeply hidden etiological factors involved in mental illness. Despite the glowing reports that are offered in this book as well as other treatises on these drugs, research as to cause of illness must be followed.

The history of tension is also taken up in a very philosophical manner, which is interesting for the reader, but not particularly enlightening. It repeats many of the things said previously, but in a very entertaining way. The history of tension is traced over the years and is related to the various facets of culture in life. Quoting William James, "Sobriety diminishes, discriminates, and says no. Drunkenness expands, unites, and says yes." This is an example of this part of the book.

Most of the authors divided the tranquilizers pharmacologically into the autonomic suppressants as, Reserpine, Chlorpromazine, and other related alkaloids. Another group called central relaxants, consisting of Meprobamate, Mesantoin, and related compounds. Others divided them according to their actions as well as their pharmacological effect.

One study indicates that Meprobamate produces no behavior toxicity in tests, either in driving or steadiness of vision. While on other tests of animals would tend to indicate that the learning processes were markedly affected.

Several groups note the difference in the effect of Reserpine, Chlorpromazine and Meprobamate. Many were very sure of their results with these drugs, others had questions. Some knew the mechanism involved about all the phases of the action of the drugs, and others admitted they knew very little.

Some research was reported on animal experiments and there were many reports measured in the clinical situation as well as with the electro-encephalographic tracings. Several authors took issue with the semantics in reporting the action of the drugs and indicated that this may have something to do with the final overall conclusions.

There was indication that the social environment of nursing units affected the use of tranquilizers in their prescribed quantity. Also, that the psychiatrist was in some way responsive to the social contact with his patient and that he modified the treatment program accordingly.

Most papers remarked about the few side effects of Meprobamate and were interested in the safety of this drug as compared to the other tranquilizers. Several authors brought out the use of Meprobamate in muscle relaxing—such as rheumatic diseases, and noted that others seemed to be helped through lowering of the emotional tension.

The concluding remarks by R. W. Gerard, seemed significant in his summary in regard to classification, in which he stated that the greatest importance was to analyze the mechanism of the action of the drug, rather than describe the overall effects. Of the drug

(Continued on Page 1133)

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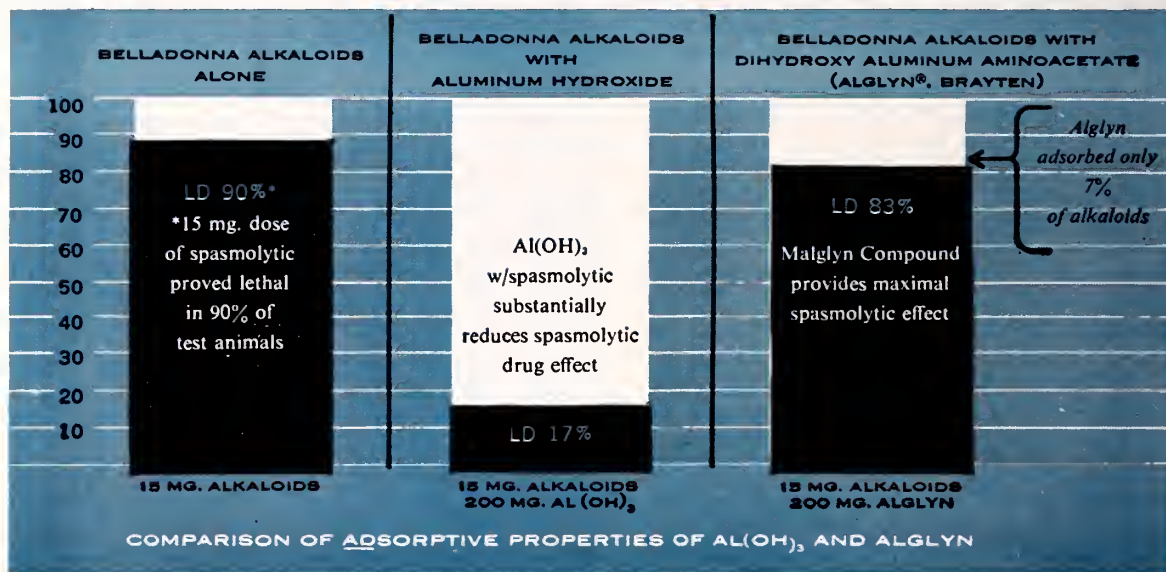
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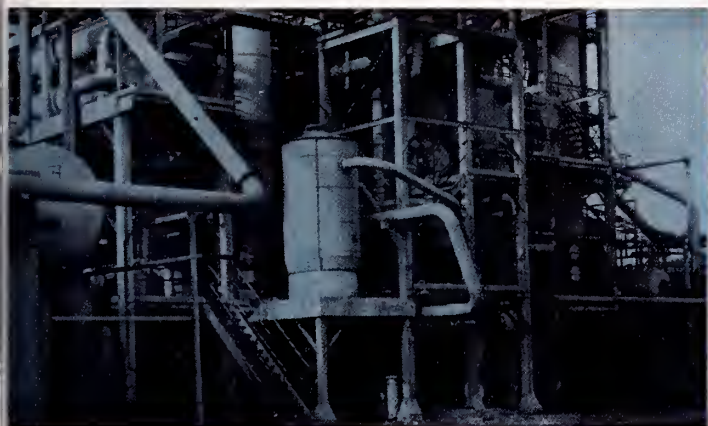


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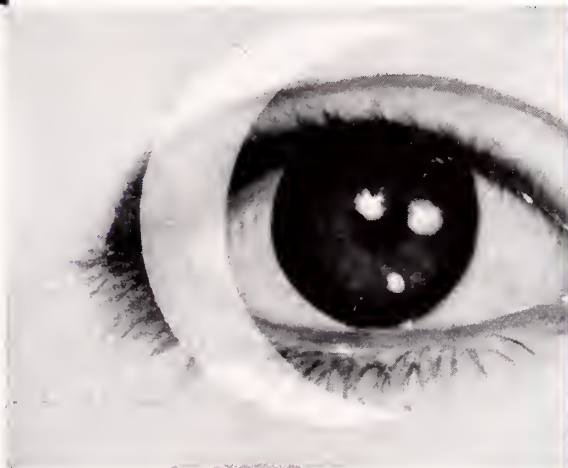
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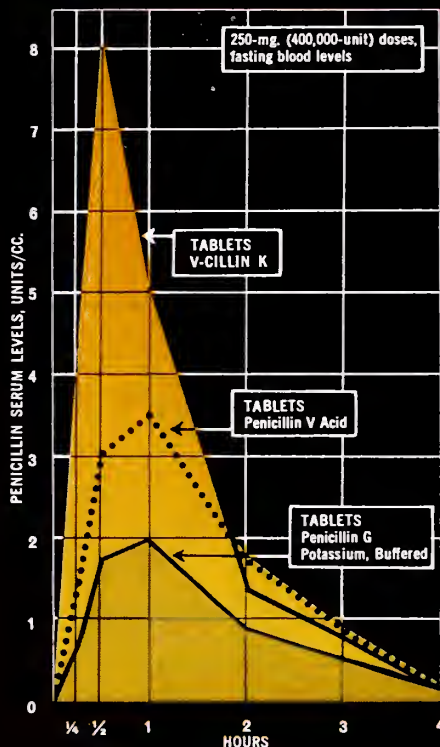
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No. 12

OBSTETRIC HEMORRHAGE*

DOUGLAS M. HAYNES, M.D.**

Louisville, Kentucky

IT is often loosely stated that the majority of obstetric patients, if left entirely alone, will deliver themselves safely without benefit of medical attention. As everyone with obstetric experience well knows, such a point of view is entirely without justification in fact. Although it is true that most obstetric patients have a good prognosis for recovery from a given pregnancy, there is no field of medicine in which more desperate emergency situations can arise as suddenly as in obstetric practice. A necessary quality of the competent obstetrician is the ability to change at a moment's notice from an attitude of watchful waiting to one of decisive, and sometimes radical, action for the specific salvage of his patient's life.

For many years, medical students have been taught that the three principal causes of maternal death are hemorrhage, infection and toxemia. The statement remains true today; but increased understanding of the preventable features of toxemia and the flowering of the antibiotic era have brought about significant reductions in maternal mortality from toxemia and infection, while hemorrhage continues to exact a toll of victims only slightly reduced by improvements in diagnosis and treatment.

For example, the incidence of obstetric hemorrhage as a cause of maternal death in Iowa rose from 13.6 per cent in 1935 to 51.3 per cent in 1951¹; and similar trends have been observed elsewhere. Of the 41 maternal deaths in Kentucky in 1955, 12 were directly ascribable to hemorrhage of pregnancy and childbirth². In addition, it must be realized that many patients

who succumb to infection do so following a major hemorrhage which in many instances may have significantly contributed to the fatality in question by reducing the patient's resistance to the infecting organism. There can be no questioning of the importance of proper management of obstetric hemorrhage in the reduction of maternal mortality.

The causes of potentially fatal hemorrhage in obstetrics are abruptio placentae, placenta previa, postpartum bleeding, rupture of the uterus and ectopic gestation; the first four of these are chiefly complications of late pregnancy, and this paper is concerned with three of them.

Abruptio Placentae

Abruptio (or ablatio) placentae is the term ordinarily used to designate premature separation of the normally implanted placenta. This is synonymous with the British term "accidental haemorrhage," so-called because the basic lesion is an acute accident at the placental site resulting in separation of a part of the placenta with resulting bleeding from the underlying maternal sinuses. The pathology of this condition is thus essentially analogous to that of abortion, and it can be considered to be an abortion at or near term.

INCIDENCE: The incidence of abruptio has been variously reported between one in 100 and one in 500 pregnancies; if all instances are included, the former figure is probably more nearly correct. Although complete separation of the placenta is encountered rather rarely, minor degrees of abruption are quite common. Severe grades of abruption ordinarily occur near or at term prior to the onset of labor, and are often associated with the preeclampsia-eclampsia syndrome.

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**Departments of Obstetrics and Gynecology of Louisville General Hospital and the University of Louisville School of Medicine.

Milder forms of abruptio tend to develop during labor, and especially toward the end of the second stage; these mild varieties of the complication probably occur fairly often, but they are usually of only minor clinical importance because delivery promptly follows the placental accident and fetal mortality is not increased.

ETIOLOGY: Studies of the etiology of abruptio suggest that this complication probably has a number of different pathogenic mechanisms. Although direct trauma to the abdomen may occasionally result in abruptio, this is an infrequently demonstrable antecedent of the syndrome. Of far greater importance is the association of abruptio with the preeclampsia-eclampsia syndrome (i.e. toxemia of pregnancy). It is well known that toxemia is frequently accompanied by retroplacental and myometrial hemorrhage of varying degrees, often with widespread secondary infarction.

The importance of toxemia as an etiological factor in abruptio is illustrated by Dieckmann's figure that 69 per cent of patients with abruptio at Chicago Lying-In Hospital had signs of pregnancy toxemia.

This and other studies also consistently indicate that the severity of the toxemia bears a direct relationship to the severity of the abruptio. There is fairly recent evidence that abruptio can be produced experimentally by compression of the inferior vena cava, but it is not established that this is an important naturally occurring etiology.

Inflammation and degeneration of the decidua have occasionally been implicated, particularly in the so-called "toxic" abruptio which may follow such systemic infections as influenza. Some of the clinical manifestations of abruptio are associated with rupture of the marginal sinus of the placenta, but since this differential diagnosis cannot be made until the placenta is available for inspection, patients with marginal sinus rupture must be managed exactly as are patients with abruptio.

CLINICAL FEATURES: Any slight, perhaps repeated, hemorrhage from the uterus in pregnancy past the 28th week is evidence of a disturbance in placentation, and when pain is a part of the clinical picture, the presumptive diagnosis is abruptio until disproved. The first episode of bleeding may stimulate active uterine contraction, and when this is the case, intra-uterine hemorrhage is avoided and delivery

follows promptly. The characteristic symptom of abruptio is sudden painful bleeding; this is usually tearing in quality at first, but later becomes dull and aching with occasional colicky twinges.

In the severe type of abruptio, the well-known clinical signs of shock make their appearance. The blood pressure level varies depending on the degree of shock and hemorrhage and on the presence and severity of toxemia. Ordinarily, the amount of externally evident hemorrhage is much less than would be expected from the gravity of the symptoms; and sometimes external bleeding is entirely absent.

With concealed hemorrhage, there is gradual enlargement of the abdomen, and the uterus as it is palpated through the anterior abdominal wall becomes progressively harder to the touch, eventually taking on a board-like consistency. When the area of separation is on the anterior or lateral aspect of the uterus, an exquisitely tender spot is palpable over the abruption site: this sign is quite helpful when present, but its absence does not mean that no placental separation has taken place, as the abruption which is located on the posterior aspect of the uterus will not be associated with focal tenderness. In severe abruptio, the fetal heart sounds may disappear soon after the onset of symptoms, although with less severe syndromes the fetal heart beat remains audible. When labor supervenes spontaneously, it does so suddenly and is often rapid and tumultuous, terminating the maternal emergency promptly. On the other hand, when the uterine contractions are weak and irregular, maternal hemorrhage and shock are often serious problems confronting the physician.

MANAGEMENT: Of prime importance in the management of placental abruption is the prompt availability of blood transfusion. Even when the amount of bleeding is small, preparations for transfusion should constitute the first step in the treatment of every patient with suspected abruptio. Further management depends on the rate at which bleeding takes place and on the condition of the cervix. As long as the amount of bleeding is minimal, expectant treatment is preferable; but it should be clearly understood that this refers to both external and concealed bleeding, and not to external bleeding alone.

When in the physician's judgement the total amount of bleeding is such that prompt hemo-

stasis is necessary, the route chosen for delivery is dependent upon the condition of the cervix. If the cervix is firm and uneffaced and the infant of clearly viable size, Caesarean section represents the treatment of choice. Indeed, abdominal delivery may sometimes be necessary even though the fetus may have died *in utero* if control of bleeding cannot be obtained promptly by other means. If, on the other hand, cervical effacement and partial dilation are present, vaginal delivery is usually feasible.

When labor is not yet well established, it can be instituted by simple artificial rupture of the membranes, supplemented if necessary by Pitocin® stimulation. As soon as uterine contractions are well-established, hemorrhage will be controlled, and in cases of abruptio one may safely administer small doses of Pitocin® since there are no large maternal sinuses near the cervical os, as is the case in placenta previa.

A rarely encountered form of abruptio placentae, the so-called Couvelaire uterus or 'utero-placental apoplexy', is worthy of mention because of its dramatic clinical manifestations. This is a placental accident of maximal severity characterized by sudden, forceful retroplacental hemorrhage accompanied by profound, rapidly developing shock. The uterus assumes a spectacularly rigid consistency, and the fetal heart beat is usually absent shortly after the onset of the symptoms. Although there may be some external hemorrhage, this is not often a prominent feature, and it is out of proportion to the clinical manifestations of shock.

In true uteroplacental apoplexy, blood infiltrates and disrupts the myometrial muscle bundles, and as a result the usual hemostatic mechanisms of the uterus, which depend on the maintenance of uterine contractility, are no longer effective. As a consequence, the only possible curative treatment is immediate Caesarean hysterectomy. It should be emphasized, however, that the incidence of uteroplacental apoplexy is so low that this heroic procedure is very rarely indicated.

Placenta Previa

By the term "placenta previa" is meant the partial or complete implantation of the placenta in the lower part of the uterus. The degree of placenta previa is determined by the findings on vaginal examination at the time of the first clinical manifestations of the condition. The usual classification may be summarized as

follows:

Total Placenta Previa (or Central Placenta Previa): the internal os is completely covered by placenta.

Partial Placenta Previa: the internal os is partially covered by placenta.

Marginal Placenta Previa: there is no uncovered placenta, but the edge of the placenta can be palpated when the examining finger is introduced into the cervix.

Of these, the least common but potentially most serious type is the central variety, representing 13 per cent of all cases; partial previa accounts for approximately one third of the cases, while the least serious variety, marginal placenta previa, is commonest of all (54 per cent).

INCIDENCE AND ETIOLOGY: Placenta previa is far from an occasional curiosity, being encountered approximately once in every 300 third trimester pregnancies. The direct cause of the clinical manifestations of the condition is, of course, primary implantation of the zygote on or near the internal cervical os, or growth of the chorionic villi in the abnormally located reflexa; but the factors responsible in the first place for the abnormal implantation are completely unknown.

PATHOLOGY: Placenta previa produces maternal hemorrhage, and is not associated with fetal blood loss. When in the latter months of pregnancy the lower uterine segment is formed as the result of Braxton-Hicks contractions, the low-lying placenta becomes partially detached at its margin, exposing blood-filled maternal sinuses. Even though clotting takes place following hemorrhage from such an exposed sinus, the continued tissue realignment which follows the constantly recurring uterine contractions opens maternal sinuses cephalad, and brings about repeated episodes of hemorrhage. The lower the implantation site, the earlier in pregnancy partial detachment and hemorrhage tend to occur; it follows that severe varieties of placenta previa bleed earlier than mild varieties, and the most immature fetuses are likely to be associated with central placenta previa.

CLINICAL FEATURES: Any patient who develops painless bleeding in the third trimester of pregnancy must be considered to have placenta previa until this diagnosis has been definitely ruled out. In the typical case, the first

hemorrhage occurs at night; the patient awakens and thinks she has wet the bed, only to discover that she has had a considerable hemorrhage. The first hemorrhage is rarely life-endangering, but there is a tendency for each succeeding hemorrhage to be more extensive than the preceding ones. If no prior treatment is instituted, labor will ordinarily supervene spontaneously after the second or third episode of bleeding. The uterus is non-tender on palpation, and systemic signs are absent unless the hemorrhage has been of sufficient magnitude to produce shock.

The only certain method of diagnosis of placenta previa is the direct digital palpation of placental tissue through the partly dilated cervical os. Certain difficulties are associated with the practical use of this method, since even a very gentle vaginal examination may start a vicious hemorrhage requiring heroic measures for its control. Before any digital examination is attempted in a patient suspected of having placenta previa, preparations must be made for dealing promptly with a suddenly developing hemorrhagic emergency. This means that such a patient should be examined only in a delivery room or operating room in which immediate mobilization of a full surgical team is possible. Since many unnecessary operations would be undertaken if the digital examination were omitted, such examination should precede every definitive therapeutic measure for placenta previa.

Certain indirect methods exist for the presumptive diagnosis of placenta previa; and these may be helpful in providing confirmation of suspicion. Dippel and Brown³ have described a method whereby soft tissue roentgenography is utilized to visualize the placental shadow. When the placenta is visualized in the fundus of the uterus, its presence in the lower uterine segment is obviously excluded. Although some authors have claimed as much as 90 per cent accuracy for this method, others (notably Moir⁴) maintain that in at least some instances the supposed placental shadow is in reality due to asymmetrical distribution of amniotic fluid.

Of greater usefulness in equivocal cases is the cystographic method of Ude, Weum and Urner⁵ as modified by Prentiss and Tucker.⁶ This method involves outlining the cranio-vesical space by filling the bladder with air. One hundred cubic centimeters of air are introduced

into the bladder through an ordinary catheter, and an anteroposterior film is made by centering the tube on the bladder and tilting the table, foot down, at an angle of 10 degrees from the horizontal. Right and left semilateral views are then taken with the pelvis rotated 35 degrees first to one side and then to the other. Normally, the arc of the bladder parallels that of the fetal head at a distance of 1 or 2 centimeters.

When placenta previa is present, the interposition of the placental mass between the air-containing bladder and the bony fetal skull distorts the parallelism of the arcs and produces a widening of the craniovesical space of the order of 4 or 5 centimeters or more. It must be emphasized that this diagnostic aid is of no value unless all three films are made, as the widening of the craniovesical space will ordinarily be visible in only one of the films.

The method is applicable only when the fetus lies in cephalic presentation, as the irregular contour of the breech does not produce any characteristic pattern of bladder indentation. It should be reiterated that the x-ray diagnosis of placenta previa is an adjunct to the direct digital diagnosis of the condition, and ought never to be used as a substitute for properly conducted vaginal examination.

TREATMENT: When placenta previa is suspected, the patient should be removed promptly to a well-equipped hospital. It cannot be emphasized too strongly that expectant treatment in the home has no place in the management of this complication. At least 1000 cc. of compatible blood should be crossmatched and made available for immediate use. Vaginal examination may either follow immediately, or, if bleeding has stopped, an attempt may be made to visualize the placenta according to one of the x-ray methods described above. Once the diagnosis has been made, the management depends on the size of the baby, the severity of the placenta previa and the extent of vaginal bleeding.

When the fetal size is such that there is question as to its viability, it has been shown⁷ that it may occasionally be permissible to temporize in the hope of securing additional infant size. If this policy is adopted, it must be carried out with the patient under constant surveillance in the hospital; and on no account should such expectancy be allowed to continue after a second hemorrhage has taken place.

Over half of all cases of placenta previa encountered can be managed by vaginal delivery following spontaneous labor with antecedent rupture of the fetal membranes. When this course is open to the physician, it is associated with the best chance for fetal survival (approximately 90 per cent).

Sometimes, however, simple artificial rupture of the membranes may not suffice to control hemorrhage because of insufficient uterine contraction. When bleeding persists after amniotomy, control of bleeding may be secured by attaching a half-pound weight to the fetal scalp by means of a toothed forceps. This maneuver favors descent of the head into the pelvis, produces hemostasis by effecting direct pressure against the bleeding lower segment sinuses, and tends to produce spontaneous onset of labor by reflex mechanical stimulation.

Upwards of three-fourths of all cases of placenta previa may be treated by combinations of these simple methods with less than 20 per cent fetal mortality. Caesarean section should be performed only when it is clearly indicated for the sake of the baby, and the rational use of abdominal delivery in placenta previa is therefore usually confined to central placenta previa and an occasional severe partial variety. Such cases will not comprise more than one-third of all placenta previa, and would ordinarily be even less commonly encountered.

Certain methods formerly recommended for the management of placenta previa have now fallen into desuetude and, for the most part, justly so. For example, it is absolutely contraindicated in every case to use cervical or vaginal packs of any sort, or to attempt mechanical dilation of the cervix by any means. Sometimes maternal hemorrhage can be controlled by the intraovular insertion of a hydrostatic bag, but this method significantly increases the fetal hazard, since a bag large enough to produce a helpful degree of cervical dilation compresses and renders non-functional a dangerously large area of the placenta.

Finally, the use of the Braxton-Hicks version, in which internal podalic version through the partially dilated cervix is used in order to produce tamponade of the bleeding area by means of the breech, is mentioned here only to be condemned, as such a procedure is technically difficult, and may be followed by the maternal catastrophe of uterine rupture, besides being seriously damaging to the fetus.

Postpartum Hemorrhage

Deaths from hemorrhage in obstetrics are most often the result of indecisive action or active mismanagement during the third stage of labor, and should therefore be considered preventable. It has been correctly said that the survival of a severely bleeding postpartum patient depends upon the action taken by the attending physician during the 15 minute period which immediately follows the hemorrhage.

Such immediate postpartum bleeding occurs at a moment when there is a tendency for the vigilance of the delivery room staff to be relaxed somewhat. Constant careful checks should be made in the immediate post-delivery period to see that the blood pressure remains stable, that the uterine fundus is well-contracted, and that vaginal bleeding is not excessive.

ETIOLOGY: Immediate postpartum hemorrhage is most often caused by inefficient uterine contraction as a result of which the normal mechanism of hemostasis fails. This mechanism consists of active contraction of the myometrium which in turn compresses the bleeding maternal sinuses at the placental site. In most instances, the etiology of uterine inertia is obscure, although certain circumstances are known to predispose to ineffective myometrial contraction. These include such systemic causes as anemia, general debility, shock, and ether anesthesia, and certain local factors, including intramural leiomyomas, over-distension (hydramnios, multiple pregnancy), lacerations sustained at the time of delivery, and intrauterine retention of placental fragments. Local trauma to the genital tract must always be ruled out as the cause of postpartum hemorrhage before the assumption is made that uterine inertia is actually responsible in a given instance.

DIAGNOSIS AND MANAGEMENT: The quantitation of postpartum blood loss is often difficult, as only very gross estimation is possible. Under normal circumstances, a patient loses some 200 to 300 cc. at delivery; and it is generally accepted that the diagnosis of postpartum hemorrhage is made only when the total blood loss is 600 cc. or more. Delivery room personnel tend to underestimate the amount of blood loss associated with a delivery. When possible, shed blood should be collected in a placenta basin and measured. The amounts present on sponges, drape sheets and floor must be estimated by inspection. Every obstetrician should make it his custom to remain in

attendance in the delivery room for at least one hour following the completion of labor. Avoidance of serious maternal sequelae to hemorrhage depends on the patients' coming to labor and delivery with an adequate circulating hemoglobin value, as well as upon the prompt availability of blood for transfusion; but of greatest importance is the immediate recognition of excessive blood loss as soon as it occurs.

It is wise to follow a rather set routine whenever a puerperal patient exhibits excessive bleeding. First, all obstetric patients should have their blood type determined as an inflexible part of their routine antepartum care: this may save valuable time in the event of a sudden emergency. Next, some routine system of procedure should be followed, beginning with the administration of an oxytocic, and its prompt repetition if the uterus does not respond.

If significant vaginal bleeding persists in the presence of palpable increase in uterine consistency, the patient should immediately be placed in the lithotomy position, and the vagina and cervix should be carefully inspected for bleeding lacerations. Any such lacerations must be sutured immediately. If no such lesions are encountered, the uterine cavity should be explored manually, and any retained placental fragments should be removed.

Thereafter, it is the author's practice to administer a hot sterile intrauterine douche, at the same time performing a gentle bimanual massage; this combined maneuver will usually produce prompt hemostasis. Continued uterine contraction may be secured by the administration of Pitocin® by dilute intravenous drip. If the uterus fails to contract following administration of the original oxytocic, one may proceed immediately to gentle massage of the fundus. If this does not stop the bleeding, the douche and bimanual massage may be done as described above.

These simple measures will stop postpartum hemorrhage in all but a very small number of cases. In these instances, it may be necessary to perform an emergency hysterectomy. Although the necessity for so drastic a procedure arises only very seldom, when it does become necessary the conditions under which the procedure must be performed are extremely trying and unfavorable, and the situation demands a well trained and experienced physician.

When a hemorrhagic emergency arises it

should be dealt with by the attending physician who understands the case and is on hand to make the diagnosis and carry out the therapy. A hastily summoned surgical consultant will know nothing of the antecedent events, and may possibly even be innocent of obstetric knowledge.

HYPOFIBRINOGENEMIA: In recent years, numerous investigators have become interested in the obstetric aspects of fibrinogen depletion of the peripheral blood. The hypofibrinogenemic state is statistically a most uncommon cause of obstetric hemorrhage; furthermore, in many of the specific clinical instances which have been reported, the depletion of fibrinogen has been inferred from the sudden development of an apparent disturbance in the clotting mechanism, and has not been demonstrated objectively.

The three obstetric situations in which clinically significant depletion of fibrinogen has been described are some cases of abruptio placentae, retention of a dead fetus in the syndrome of missed abortion, and the clinically somewhat nebulous state of amniotic fluid embolism. The explanation of suddenly developing fibrinogen depletion in cases of placental abruption is far from clear, but it is thought that the development of a retroplacental hematoma may bring about the release of thromboplastic substances which in turn promote intravascular coagulation and defibrination of blood.

A simple method for the quick determination of fibrinogen has been described.⁸ If one cubic centimeter of venous blood from any obstetric patient is added to two drops of reconstituted topical thrombin, a clot will form promptly, regardless of the fibrinogen level. If hypofibrinogenemia is present, this clot will contract within the space of a minute or two, and its contained red blood cells will become extruded. On the other hand, if the fibrinogen content of the blood sample is normal, the clot will remain intact. This simple test can be performed in a very few minutes whenever fibrinopenia is suspected, and if it is positive, the patient should be given immediate fibrinogen replacement therapy.

DELAYED POSTPARTUM HEMORRHAGE: The clinical features of the type of immediate postpartum hemorrhage that has been discussed above are so dramatic that few

obstetric attendants will fail to recognize the problem soon after the condition has developed. However, postpartum hemorrhage may present a far more insidious picture, and a seriously exsanguinated patient may be neglected because of lack of recognition of the fact that significant hemorrhage has taken place.

For example, a patient may be returned to her room or to the obstetric ward after delivery in what appears to be good condition. A pad on which she lies may be removed in an hour's time by the nurse, who records on the chart that the patient is bleeding slightly more profusely than average; but she may not feel that the total blood loss is alarming. Several pad changes later, the nurse on an oncoming shift or the intern making routine rounds may notice a pale, sweating patient; and to his astonishment a check of her pulse shows a marked tachycardia, while her systolic blood pressure is below 100 and her diastolic level is not audible. The patient, in other words, is in hemorrhagic shock, yet none of her attendants has been conscious of the undeniable fact that she has been bleeding excessively for several hours.

If protocols of maternal death from hemorrhage are studied, cases of this type are not infrequently encountered; so that the danger of an insidiously developing hemorrhage must be constantly kept in mind, especially in a patient in whom firm contraction of the fundus is not present immediately following delivery, even though no alarming hemorrhage is present at that time.

Another form of delayed postpartum hemorrhage that is worthy of brief mention is that resulting from the retention of a fragment of placenta in the uterus for a matter of days or weeks following delivery. The patient may exhibit a tendency toward incomplete contraction of the puerperal uterus, and the fundus as palpated may be of a somewhat boggy consistency, but vaginal hemorrhage may not be a problem in the early puerperium. Of course, routine inspection of the placenta immediately following its delivery is performed by all experienced obstetricians, and this will suffice to indicate absence of portions of the cotyledonary surface of the placenta; but even the most experienced attendant may not be able to recognize the presence of a retained succenturiate lobe until clinical signs of hemorrhage occur.

Such a retained placental tissue fragment

becomes necrotic and undergoes partial organization in the subinvolved uterus, with the formation of what is rather ambiguously termed a 'placental polyp.' At any time during the first four weeks of the puerperium, but usually within two weeks of delivery, the patient may experience a sudden, extremely profuse and sometimes immediately exsanguinating hemorrhage.

Usually the bleeding is painless, although occasionally there may be some associated cramping pain. Prompt blood replacement followed by curettage is the treatment, and the hemorrhage can usually be controlled by the latter procedure. The attending physician must be prepared, however, for the development of a serious systemic infection, as the partially necrotic placental polyp often contains saprophytic organisms which produce a serious bacteremia and septicemia which must be treated vigorously with broad spectrum antibiotics.

Summary and Conclusions

Clinically important causes of hemorrhage in obstetrics include abruptio placentae, placenta previa, and postpartum hemorrhage, both immediate and delayed. These entities have been discussed from the viewpoints of etiology, clinical picture, diagnosis and management. The developments of recent years in such aspects of medicine as antibiotic therapy, empiric treatment and prevention of toxemia of pregnancy, and prenatal care have had relatively slight effect in the reduction of maternal mortality from hemorrhage, which now represents the principal obstetric killer. Reduction of the death rate from obstetric hemorrhage depends on the skill and experience of the physician in recognizing and treating promptly the various manifestations of this most important complication of pregnancy.

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CLINICAL EVALUATION OF THE RHINOTOMY OPERATION*

JOHN E. BORDLEY, M.D., AND FRED H. LINTHICUM, JR., M.D.

Baltimore, Maryland

THE usual operative approaches to the nasal and paranasal spaces fail to provide sufficient access for proper surgical removal of the extensive lesions occasionally encountered in this region. The conventional operative exposures for such lesions also cause severe external mutilation and impair the physiology of the upper respiratory tract.

The Procedure

In 1949 three cases were reported from the Johns Hopkins Hospital¹ in which adequate exposure of the nasal passages and all the accessory nasal sinuses was obtained by a rhinotomy operation. In this procedure the external nose is swung to one side, using the soft tissues of the naso-facial angle as a hinge. To mobilize the nose for swinging aside, a bilateral osteotomy is done as shown in Figure 1 and the septum is divided anteriorly with scissors. After

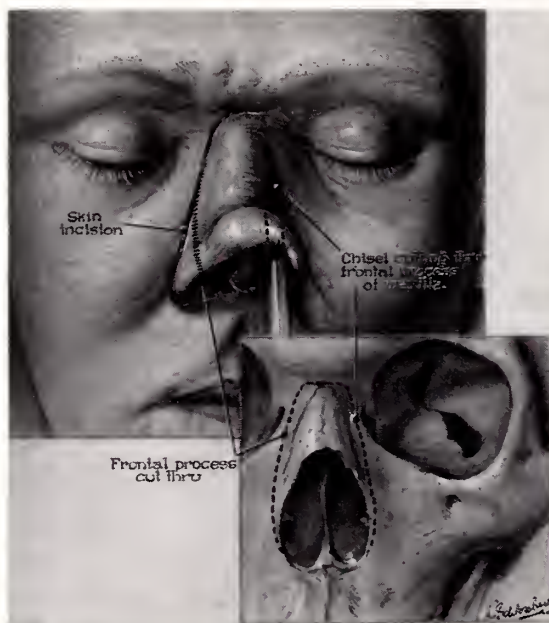


Fig. 1.

the external nose has been swung aside, part of the septal cartilage and the perpendicular plate of the ethmoid are removed by a sub-mucous resection technique, taking care to leave intact an anterior column of septal cartilage to support the bridge of the nose later. By this technique the function of the nasal septum is preserved and an adequate blood supply of the temporarily displaced nasal pyramid is maintained through the soft tissues of the hinge.

When desired it is possible, by means of secondary incisions extended from the vault of the nose up over each brow, to obtain an excellent exposure of the frontal and ethmoid sinuses as well as of the maxillary and sphenoid sinuses (Fig. 2).

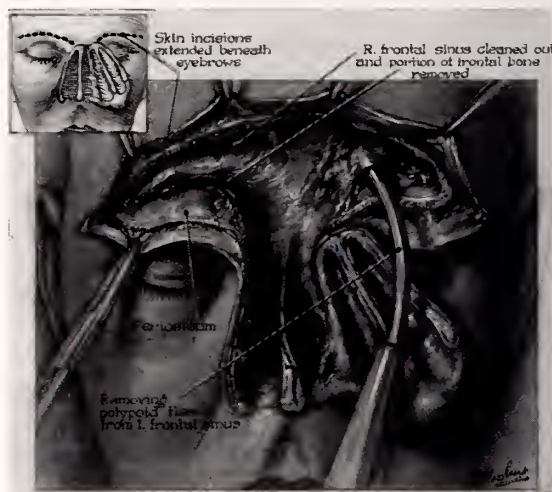


Fig. 2.

The rhinotomy operation provides a better exposure of both intranasal spaces and the upper paranasal sinuses than does Longmire's modification of Ferguson's operation², although it is not as effective an approach to the lateral portion of the maxillary sinus or to the floor of the orbit. The technique described in 1949 is somewhat similar to that used by Bruns in the latter part of the last century^{3,4}.

To date twenty-five rhinotomy operations have been performed at the Johns Hopkins Hospital. The tabulated information (Tables 1 to 4) about these cases indicates the conditions for which this surgical approach may be considered preferable to the conventional operative methods. It will be noted that two of the patients had two rhinotomies each. In both instances after the second operation the integrity of the nasal septum was re-established and the physiology of the nose remained satisfactory.

*From the Department of Otolaryngology, The Johns Hopkins University School of Medicine, Baltimore, Maryland.

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Discussion of Results

Grouping of the cases has been on the basis of the following four broad categories:

1. Chronic sinusitis with severe polyp formation, 2. Osteomyelitis involving the paranasal sinuses, 3. Benign tumors of the intranasal spaces and paranasal sinuses, 4. Malignant growths not requiring radical resection of the maxilla or removal of the eye.

The patients of the first group (Table 1) were all operated upon before the advent of steroid therapy. They had all had antibiotic therapy, allergic follow-up and conservative surgical procedures, but had continued to suffer from severe chronic infection, polyposis, and complete nasal obstruction. As a group they have done well since rhinotomy; only one of them has had to go on steroid therapy, and he has done so only after acute colds. With our present steroid therapy, combined with hypsensitization and selected antibiotics, some of these patients undoubtedly could have been handled satisfactorily without such extensive surgery.

Two of the three patients with osteomyelitis had frontal sinus fistulae (Table 2). The os-

teomyelitis in both of them developed after long standing chronic sinusitis, and in the third case osteomyelitis resulted from an injudicious use of electrocoagulation on the bony nasal septum. In this patient it was necessary to remove the vomer, the anterior wall of both sphenoid sinuses, some ethmoid cells in the region of the orbit and a portion of the left frontal bone. Some crusting has persisted since operation in this case.

Ten benign tumors were operated upon by the rhinotomy approach on twelve occasions (Table 3). The patient with a chromophobe adenoma of the pituitary which had eroded into the nasopharynx was operated on twice before the growth was controlled. The boy with a myxoma involving the ethmoid and sphenoid sinuses and the nasopharynx has also had two rhinotomies and a full course of x-ray. He has evidence of slow recurrence again. The mucocele and the hemangioma had both involved the orbit as well as the sinuses and had caused diplopia and proptosis. These patients were referred by the eye service. Vision returned to normal and the proptosis subsided in each case after operation; there has been no recurrence in over two years. The remaining benign tumors

TABLE 1. Patients who had a Rhinotomy Operation to obtain relief from Chronic Sinusitis.

LESION	PREVIOUS THERAPY	RESULT
1. Polyposis Intrinsic Asthma Complete Nasal Obstruction	Ethmoid, Sphenoid and Maxillary Sinus Surgery Allergic Tests, Negative	No Recurrence of Asthma or Polyps in 27 Months
2. Pansinusitis, Chronic Purulent Polyposis Nasal Obstruction	Repeated Polypectomies Allergic Tests, Negative	Recurrence of Small Polyp after 8 Months; Controlled with Silver Nitrate Cauterization
3. Intranasal Adhesions with Severe Degree of Obstruction Polyposis	Bilateral Ethmoid and Maxillary Sinus Surgery	No Recurrence in 4 Years
4. Pansinusitis, Chr. Polyposis	Repeated Polypectomies	No Recurrence; 30 Months
5. Pansinusitis, Chr. Polyposis Asthma	Repeated Polypectomies	Polypectomy, Right Side, after 1 Yr.; No Other Recurrence in 5 Years

TABLE 2. Patients whose Osteomyelitis was surgically approached via a Rhinotomy Operation.

LESION	PREVIOUS THERAPY	RESULT
1. Osteomyelitis of Right Ethmoid, Sphenoid and Frontal Sinuses Vomer Sequestration	Intranasal Electro-Coagulation of Nasal and Septal Mucous Membranes	No Recurrence in 4 Years
2. Pansinusitis, Chr. Supraorbital Fistula on Right Side Dacryocystitis	Frontal Trephine	No Recurrence in 4 Years
3. Osteomyelitis of Frontal Bone Supraorbital Fistula Sinusitis, Chronic	Frontal Trephine Ethmoid and Maxillary Sinus Surgery	No Recurrence in 2 Years

TABLE 3. Patients with Benign Tumors in whom the Rhinotomy Procedure was used to expose the abnormal growth.

<u>LESION</u>	<u>PREVIOUS THERAPY</u>	<u>RESULT</u>
1. BONY CYST, Ethmoid Labyrinth	None	Small Recurrence in 1 Year Removed Locally
2. BONY CYST, Ethmoid Labyrinth	None	No Recurrence in 1 Month (Failed to Return)
3. ENCEPHALOCELE, Juvenile, Extending into Nasal Septum and Right Ethmoid Sinuses	Intracranial Section of Stalk and Bone Graft in Bony Defect	No Recurrence in 30 Months
4. CHROMOPHOBE ADENOMA, Pituitary, with Extension into Vault of Nasopharynx	Intracranial Exposure and Drainage, on Two Occasions	Recurrence after 18 Months Second Rhinotomy, with Partial Recurrence in 3 Years
5. MUOCOCELE, Involving Right Frontal, Ethmoid and Maxillary Sinuses, Both Sphenoid Sinuses and the Right Orbit	None	No Recurrence in 28 Months
6. HEMANGIOMA of Left Frontal and Ethmoid Sinuses, Left Orbit and Left Middle Turbinate	None	No Recurrence in 26 Months
7. PAPILLOMA, Inferior Turbinate. Question of Malignant Change	Biopsy	No Recurrence in 15 Months
8. PAPILLOMA, Ethmoid Labyrinth	Biopsy	No Recurrence in 10 Months (Failed to Return)
9. OSTEOPHIBROMA, Right Frontal, Ethmoid and Maxillary Sinuses and Right Inferior Turbinate	None	No Recurrence in 3 Months (Failed to Return)
10. MYXOMA, Right Maxillary and Ethmoid Sinuses, Both Sphenoid Sinuses and Nasopharynx	Two Intranasal Operations and One Adenoidectomy	Recurrence in 6 Weeks; Second Rhinotomy at 6 Mo. with Recurrence in 2 Mo.

TABLE 4. Patients whose Malignant Growths were operated on via a Rhinotomy Approach.

<u>LESION</u>	<u>PREVIOUS THERAPY</u>	<u>RESULT</u>
1. PAPILLARY CARCINOMA, Right Ethmoid, Maxillary and Sphenoid Sinuses	Biopsy	No Recurrence in 12 Months (No Further Follow-Up)
2. PAPILLARY ADENOMA, Ethmoid Sinuses	Biopsy	No Recurrence in 21 Months (Failed to Return)
3. ADENOCARCINOMA, Nasal Septum	Biopsy	No Recurrence in 2 Months (Failed to Return)
4. PLASMOCYTOMA, Ethmoid Sinuses, Cribriform Plate	Biopsy	Died from Intracranial Extension in 12 Months
5. BLOOD VESSEL TUMOR of Embryonal Type in Nasopharyngeal Vault, Left Ethmoid Sinuses, Left Infer. Turbinate	Four Intranasal Operations, each with Exsanguinating Hemorrhage, and followed by Recurrences	No Recurrence in 30 Months
6. LETHAL MIDLINE GRANULOMA	Multiple Intranasal and Intra-Sinus Operations	Died from Intracranial Extension after 3 Years
7. LETHAL MIDLINE GRANULOMA	Multiple Intranasal and Intra-Sinus Surgical Procedures	Recurrence after 2 Months; Lesion Still Active after 2 Years

were relatively easily approached by this technique, and the patients developed no post-operative complications.

Seven cases have been classified as malignant; the data for them are presented in Table 4. Two of the patients were placed in this

category because of their clinical course rather than because of a microscopic diagnosis of malignancy. These patients developed lethal midline granulomas. Each had numerous local operations previous to rhinotomy, which was done in a late effort to get ahead of the disease.



Fig. 3. Photographs taken before (left) and 8 months after a rhinotomy operation.

One of these patients is still alive, although the lesion continues to spread. His chance of cure is indeed extremely poor.

The plasmocytoma was found at operation to have invaded the cranium; the patient died within a year in spite of a full course of x-ray. The young woman whose tumor was identified as an embryonal type of angioma had an admission diagnosis of sarcoma. She had undergone surgery on three previous occasions and each time excessive bleeding had stopped the procedure. At the rhinotomy operation the tumor was found to include the sphenopalatine

artery. Bleeding was easily controlled by pressure and electro-coagulation as a result of excellent exposure.

The cosmetic results of a rhinotomy procedure are acceptable (Figs. 3 and 4). The operation is less mutilating than are the conventional external surgical approaches to the intranasal spaces.

Summary and Conclusions

Twenty-five rhinotomies have been performed at the Johns Hopkins since 1949. Each patient has been carefully selected because of



Fig. 4. Photographs taken 6 months after an operative exposure like that shown in Fig. 2.

the necessity of maximum intranasal exposure. All of the lesions presently reported would have been difficult or impossible to expose and remove in their entirety by previously described procedures in which but one nasal passage is opened, and in which the septum limits the space for visualization and instrumentation. In no case in this series has there been any loss of tissue postoperatively as the result of insufficient blood supply. These cases are presented to illustrate the conditions in which a rhinotomy of this type can be of advantage. This procedure is time consuming, but results in very little shock to the patient. Postoperative follow-up has shown that intranasal physiology

is little disturbed when the intactness of the nasal septum can be re-established. The rhinotomy approach should be recommended only for specially selected cases.

References

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4. Bergmann, E., Bruns, P. and Mikulicz, J.: *Handbuch der praktischen Chirurgie*. Ferdinand Enke, Stuttgart, 1900. (See Band 1, Chirurgie des Kopfes, S. 983.)

Legends

Country Doctor

He was just a country doctor,
He was raised there in the hills,
And could do most anything it seemed,
Except collect his bills.

He traveled far by horseback,
More miles than one can tell;
With saddlebags all full of pills,
And things to make one well.

And until his health was failing,
You could call him night or day;
He didn't make excuses,
But would soon be on his way.

He didn't keep you in suspense
With some high falutin names,
Or withhold the information
Of your many aches and pains.

But would sit down by the bedside,
With that well remembered drawl,
Explain the whys and wherefores,
And give confidence to all.

He wasn't a very wealthy man,
As far as money went,
But he had a wealth of friends,
And a rich life, well spent.

When his life on earth was ended,
God surely said, "Well done,
There is a mansion here for you,
Thou good and faithful one."

So we'll be looking for a door plate,
All set with shining stars,
With this simple inscription,
Just, "Dr. R. A. Byers."*

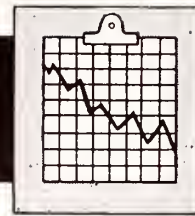
—Anna Young

* Doctor Byers, who practiced in Ohio County, died in 1941.



CASE DISCUSSIONS

From The
University of Louisville Hospitals



A Case of Traumatic Hyphema

Patient Protocol

Hospital #255940

HISTORY: R. P. B., a 9-year-old, white, male child was struck in the right eye near the limbus on September 17, 1957 by a toy airplane while playing with a group of children. His mother was not immediately aware of the extent of his injury, and on the following day, when the child continued to have tearing and pain in the right eye, she noticed that there was blood in the anterior chamber of his eye. Because of this, she immediately brought him to the emergency room at the Louisville General Hospital for further diagnosis and treatment. No treatment had been rendered prior to arrival at the hospital. **PHYSICAL FINDINGS:** On admission to the hospital the patient's visual acuity was: *O.D.*: L.P., *O.S.*: 20/20. The intraocular pressure was reported as normal to touch in each eye. The right eye showed the following: 1. Some swelling of the lids, 2. A moderate amount of tearing, 3. The conjunctiva was fiery red from congestion, and 4. The anterior chamber was completely filled with a black blood clot.

Slit lamp evaluation and gonioscopy were not attempted. The remainder of the examination of the right eye was impossible due to the extensive blood clot. The left eye was entirely normal as were the extra-ocular movements. The general physical examination was normal. **COURSE AND TREATMENT IN THE HOSPITAL:** On admission to the hospital on September 18, 1957, the patient was placed flat in bed on absolute bed rest, both his eyes were patched, medication was ordered for pain, sedation was ordered, and compresses were started.

The following morning, on rounds, it was felt, that for adequate absorption to occur, an evacuation of the blood clot probably would be necessary. Because of this possibility, the patient was transferred to the Children's Hospital.

The afternoon of the transfer the ocular ten-

sion in the right eye became elevated (secondary glaucoma). On transfer the patient was started on a soft diet, absolute bed rest with patching of both eyes, Adrenosem (carbazochrome salicylate) 5 mgm statum and then 2.5 mgm b.i.d., Diamox (acetazolamide) 125 mgm statum and 62.5 mgm every 6 hours, Elixir of Phenobarbital 1 dram every 6 hours, Nembutal suppository 1 gr H.S., and Synkavite 5 mgm. Routine laboratory studies were ordered in addition to bleeding and coagulation times. X-ray of eye and orbits was negative for foreign bodies, and a chest film was normal.

It was decided to evaluate progress of the patient's condition for a day longer. However on September 20, 1957 it was becoming obvious that a surgical procedure would be necessary. Because of this, operative intervention was recommended and scheduled.

Under a general anesthetic, after an adequate preparing of the operative field, an ab-externo incision was made at the limbus in the 12 o'clock position under a limbic based flap. Through this small incision a goodly part of anterior chamber clot was evacuated. The incision was closed and an air bubble placed in the anterior chamber. There was no further bleeding at the time of surgery.

The first post-operative day showed the eye to still be markedly injected and the remainder of the clot to be slowly absorbing. The air bubble was still in the anterior chamber. Supportive treatment was carried out and the patient continued on oral chloromycetin which had been started at the time of surgery.

The post-operative recovery was slow with a gradual absorption of the clot. On the third post-operative day it became apparent that the lens-iris diaphragm was pushed forward.

On the fifth post-operative day the oral Diamox was stopped along with the chloromycetin, as there was no evidence of infection or further bleeding, and the globe felt soft to touch. However during the night, the pressure again became elevated and the eye painful, so that the

Diamox had to be restarted.

On the sixth post-operative day the ocular tension was down, and the patient was started on steroid therapy topically every hour. The lens-iris diaphragm was still pushed forward. The significance of this will be given in the case discussion.

To date progress continues with a gradual absorption of the blood clot. There is a questionable amount of corneal staining, and the lens-iris diaphragm continues displaced anteriorly. The patient is able to perceive light and gross objects. The left eye is normal.

Case Discussion

RODERICK MACDONALD, JR., M.D.: The type of injury to the eye which has been presented here, is one of great interest to generalists, pediatricians, and ophthalmologists alike. There are a number of points to be considered in the management of these cases, some as yet unsettled.

Any number of objects can be responsible for anterior chamber haemorrhage, such as dirt clods, steel springs, rocks, fists, etc. But one of the most common is the "B-B" gun or air rifle.

In most of the reported cases the age incidence is given from 2 years to 18 years, and by far a greater number of males are injured than females.

Among the associated eye lesions which may occur along with the hyphema are:

1. Rupture of the iris sphincter,
2. Iridodiolysis,
3. Iris atrophy,
4. Cataract,
5. Macular fundus lesions (commotio retinae),
6. Vitreous haemorrhage, and
7. Blood staining of the cornea.

Since these possibilities exist in every case but the simplest, it is well to be somewhat guarded in the prognosis as to the final outcome of the case.

What then should the management of the case consist of, especially at the onset?

All eye injuries should be checked for the evidence of bleeding both in the anterior chamber and vitreous. As soon as the patient is injured and the hyphema is obvious, the patient should be placed on absolute bed rest. Bilateral patching of the eyes should be started.

The problem of miosis or mydriasis has, as yet, never been fully settled. Mydriasis (dilating the pupil) stops all movement of the uveal tract and places the eye at rest. It also helps immobilize the edge of the laceration, but on the other hand, it decreases the area available

for filtration and absorption and may hasten the onset of secondary glaucoma.

Miosis (constriction of the pupil) opens the filtration angle and makes a greater area of iris available, thereby decreasing the possibility of secondary glaucoma and increasing absorption.

However the miotic process may contribute to secondary haemorrhage by causing a further tearing of the iris root, which may have been the site of the primary bleeding. This problem is not yet settled.

The value of hot and cold compresses is somewhat in question, but it would seem that hot compresses would be contra-indicated since vasodilation might increase the chance of secondary haemorrhage.

In cases in which the anterior chamber is filled with a black clot, early surgery is indicated, more especially in the presence of secondary glaucoma, as this will lead to corneal staining with blood pigments and further damage to the intra-ocular structures. If there is residual corneal staining of a severe degree, this can, at times, be overcome by keratoplasty at a later date.

The use of X-ray to study the eyes and orbits for foreign bodies should be encouraged. Small foreign particles may enter the eye at the time of injury and are obscured by the blood clot.

Vitreous haemorrhage may occur in association with the anterior chamber hyphema and may be manifest by the forward protrusion of the lens-iris diaphragm. This has been pointed out in this case, and there is not much to offer the patient except expectant waiting. The prognosis is poor in these cases.

The use of acetazolamide (Diamox) has proved to be of great benefit in traumatic hyphema. It is a carbonic anhydrase inhibitor and decreases the intra-ocular pressure by slowing down the rate of aqueous formation. This helps to cut down on the incidence of glaucoma and has doubtlessly saved many eyes.

Other drugs which may be of benefit are: Cevitamic acid, Vitamin K, and carbazochrome salicylate (Adrenosen). These should be used. Streptokinase has been used experimentally to aid in the absorption of the blood clot, but present preparations appear too toxic for intra-ocular use.

The long term care of these patients should be considered. Since so many of them are children, they may face life handicapped through the loss of the eye. They must be taught ad-

justment to a more restricted type of existence. Protection should be provided for the uninjured eye in the form of case hardened lens; plano if they have no refractive error, so that danger of injury to the uninjured eye is minimized.

R. A. GETTELFINGER, M.D.: In the practice of medicine, there is probably no controversy as great as the treatment of traumatic hyphema. Since it is an eye injury of common occurrence, practically all physicians have been introduced to one treatment or the other. The primary hyphema may be very innocent looking and absorb rapidly, but the occurrence of a secondary hemorrhage on the second to fifth post traumatic day creates a problem of great magnitude. The evacuation of a blood clot completely filling the anterior chamber in an eye under great pressure, may be a major surgical procedure, since the blood clot and the iris are so firmly attached. Recurrent hemorrhages may occur for weeks and even months. Since absorption of the clot may occur with any treatment, with a complete return of vision, evaluation of treatment is difficult.

I have seen the anterior chamber completely filled with blood, accompanied by a very high pressure for one week, with a return of normal visual acuity. In other instances, an eye may not be under pressure and be lost from blood staining of the cornea.

Perhaps all practicing ophthalmologists have had the experience of a patient refusing hospitalization for the treatment of a hyphema, only to have him return in two weeks for a refraction, at which time a normal eye is found. Most of us have been taught, that atropine is indicated for almost anything except glaucoma. After seeing three massive hemorrhages into eyes one hour after atropine was instilled, I consider this as the greatest contraindication in the treatment of this condition.

The occurrence of a secondary hemorrhage is so frequent and of such serious import, that other lines of treatment should be considered for primary traumatic hyphema. The injection of an air bubble into the anterior chamber, even before a secondary hemorrhage, has impressed me in those cases in which it was tried. I have used it only in those patients that could be made to lie flat in bed and co-operate in the treatment.

In the case under discussion, which was seen by me before surgery, I feel that there was little choice, except to evacuate the blood clot and instill an air bubble into the anterior chamber. This discussion only serves to emphasize the controversy that exists in the management of this type of injury and emphasizes the need for consultation. The conventional treatment outlined in this case report should be followed.

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KSMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words, and the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given: name of author, title of article, name of periodical, with volume, page, month — day of month if weekly — and year. The Journal of the KSMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. If illustrations are submitted with a paper, The Journal will assume the

cost for the first three one-column width half tones. The cost of additional illustrations will be borne by the essayist.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The By-laws of the Kentucky State Medical Association provide that all scientific discussions and papers read before the KSMA Annual Meeting shall be referred to the KSMA Journal for consideration for publication. The by-laws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky State Medical Association, 1169 Eastern Parkway, Louisville, Kentucky.

The R. W. Gaines Memorial Meeting of the Kentucky State Medical Association

Columbia Auditorium, Louisville, Kentucky, September 17, 18, 19, 1957
Digest of Proceedings of the Regular Sessions of the

HOUSE OF DELEGATES

Clyde C. Sparks, M.D., Ashland, Speaker of the House, Presiding

First Session

The first session of the House of Delegates of the Kentucky State Medical Association was called to order by the Speaker, Clyde C. Sparks, M.D., Monday, September 16, 1957 at 7.15 p.m., at the Columbia Auditorium in Louisville. Reverend Roger G. Imhoff, Pastor of the Fenner Memorial Lutheran Church, was asked to give the invocation, after which W. P. McKee, M.D., Vice Chairman of the Credentials Committee, reported that a quorum was present. A motion was made that the minutes of the 1956 meeting be accepted as published in The Journal of KSMA. The motion was seconded and carried.

The Speaker called on the Secretary to read the names of all Kentucky physicians who had died since 1956. These physicians, their location, and date of death are as follows:

Abell, Carl E., Louisville, December 22, 1956
Allphin, W. S., Georgetown, February 17, 1957
Aydelotte, Benjamin F., Louisville, September 30, 1956.
Baird, J. W., Sadieville, June 25, 1957
Bate, R. Alexander, Louisville, October 6, 1956
Belton, Judson D., Louisville, October 31, 1956
Bentley, Daniel V., Neon, April 2, 1957
Boone, Cassius A., Louisville, February 27, 1957
Buten, Edward J., Ft. Thomas, June 22, 1957
Byrd, Carl H., Harrodsburg, October 29, 1956
Chamberlain, J. Poyntz, Cynthia, January 10, 1957
Chestnut, Lee, Mt. Vernon, July 20, 1957
Cohen, David, Louisville, July 27, 1957
Coleman, Clarence T., Frankfort, July 9, 1957
Collier, Thomas R., Whitesburg, February 21, 1957
Conley, Byron R., Salyersville, May 3, 1957
Davis, Morris M., Clay, November 1, 1956
Diskins, J. Tilden, Praise, July 12, 1957
Dollar, Dougal M., Louisville, May 4, 1957
Dowden, Albert P., Louisville, February 26, 1957
Dwyer, W. M., Louisville, December 22, 1956
Eckman, William G., Covington, February 12, 1957
Emrich, William H., Louisville, June 2, 1957
Foley, Floyd K., Owensboro, February 3, 1957
Frazer, T. Atchison, Marion, October 23, 1956
Garr, Charles C., Lexington, July 28, 1957
Glasscock, J. F., Sonora, July 2, 1957
Gray, Oscar A., Flemingsburg, April 24, 1957
Hancock, Forrest D., Sulphur, July 22, 1957
Heath, L. F., Georgetown, May 13, 1957
Heim, J. W., Louisville, September 25, 1956
Henry, W. D., Crutchfield, February 18, 1957
Hunter, John E., Lexington, November 14, 1956
Hutchings, James H., Maysville, May 28, 1957
Johnson, William, Lancaster, November 6, 1956
Kelly, Clinton W. Jr., Louisville, November 15, 1956
Kelsall, O. H., Louisville, September, 1957
Koch, Ernest H., Louisville, December 3, 1956
McNeill, Clyde, Louisville, August 25, 1957
Maguire, Charles H., Louisville, November 23, 1956

Moore, J. M., Princeton, July 22, 1957
Popplewell, James R., Jamestown, May 9, 1957
Preston, Theodore, Lowmansville, February 28, 1957
Rankin, C. B., Monticello, June 11, 1957
Roberts, Daniel T., West Point, April 8, 1957
Samuels, John G., Jr., Hickman, July 14, 1957
Simpson, Holland B., Greensburg, January 28, 1957
Smith, Henry, Rochester, July 30, 1957
Smith, Jess T., Gamaliel, June 23, 1957
Smith, Mallory L., Maceo, September 22, 1956
Southard, D. B., Stanford, January 18, 1957
Sparks, Proctor, Ashland, (out of State) 1956
Stucky, William F., Dawson Springs, April 17, 1957
Thompson, C. M., Kings Mountain, October 31, 1956
Turner, Granville V., Jackson, March 31, 1957
Vallandigham, James L. Jr., Lexington, October 19, 1956
Veech, Annie, Louisville, June 10, 1957
Vigle, John B., Burnside, March 25, 1957
Vonderbeck, John, Louisville, July 21, 1957
Weathers, Marcus B., Lexington, December 22, 1956
Webb, Jack G., Lexington, October 7, 1956
Wheeler, W. H., Olive Hill, October 15, 1956
White, H. C., Covington, June 29, 1957

A moment of silent prayer was observed in their honor.

The Secretary made the general announcements, stating that a color television broadcast from the Louisville General Hospital would start at 8:30 a.m., Tuesday, and last an hour and thirty minutes, and that there would be subsequent television sessions during the meeting. He urged attendance at the President's Luncheon on Wednesday, announced that the meeting places of the General Nominating Committee and the Councilor Districts Nominating Committees would be made known at the end of this session, and pointed out seven Reference Committees would meet Tuesday operating under the same procedure as in the past.

The Speaker announced the Reference Committee appointments as follows:

Reference Committee No. 1—Reports of Officers and Councilors

Rankin C. Blount, M.D., Lexington, Chairman
H. E. Martin, M.D., Ashland, Vice Chairman
W. C. Hambley, M.D., Pikeville
Loman Trover, M.D., Madisonville
Rudy Vogt, M.D., Louisville

Reference Committee No. 2—Reports on Medical Care, Medical Education, Hospitals and Related Subjects

Richard G. Elliott, M.D., Lexington, Chairman
Foster Coleman, M.D., Louisville, Vice Chairman
Gladys L. Rouse, M.D., Florence
G. R. Tanner, M.D., Ft. Thomas
Johnny G. Reynolds, M.D., Winchester

Reference Committee No. 3—Reports on Legislation and Public Relations

Thomas Gilbert, M.D., Bowling Green, Chairman
Carl Fortune, M.D., Lexington, Vice Chairman
A. B. Colley, M.D., Owensboro
John F. Greene, M.D., Sandy Hook
James Miller, M.D., Greensburg

Reference Committee No. 4—Reports on Miscellaneous Business

Carl W. Kumpe, M.D., Fort Mitchell, Chairman
J. L. Becknell, M.D., Manchester, Vice Chairman
Robert S. Dyer, M.D., Louisville
Walter Johnson, M.D., Paducah
M. D. Klein, M.D., Shelbyville

Reference Committee No. 5—Reports on Miscellaneous Business

Roy Moore, Jr., M.D., Louisville, Chairman
Glenn W. Bryant, M.D., Louisville
Alec Spencer, M.D., West Liberty
Joe Miller, Benton
Russell Hall, Wheelwright

Reference Committee No. 6—Reports on Miscellaneous Business

Blaine Lewis, Jr., M.D., Louisville, Chairman
W. G. Edds, M.D., Calhoun, Vice Chairman
David Asher, M.D., Pineville
Douglas Jenkins, M.D., Richmond
H. G. Wells, M.D., Georgetown

Reference Committee No. 7—Reports on Miscellaneous Business

L. F. Beasley, M.D., Franklin, Chairman
Carl Cooper, M.D., Bedford, Vice Chairman
N. L. Bosworth, M.D., Lexington
Paul Side, M.D., Lancaster
Claude C. Waldrop, M.D., Williamstown

The following reports of officers and committees were presented at this time and referred by the Speaker to the Reference Committee (s) indicated below:

Report of the President—Reference Committee No. 1, with the exception of the second paragraph on page 4, which was referred to Reference Committee No. 3.

Report of the President Elect—Reference Committee No. 1.

Report of the Speaker of the House—Reference Committee No. 1.

Report of the Chairman of the Council and Recommendations of the Council—Reference Committee No. 1, with the exception of the last paragraph on page 5 to Reference Committee No. 4, and beginning with the second full paragraph and continuing through the last paragraph on pages 7 and 8 to Reference Committee No. 3.

R. Ward Bushart, M.D., Fulton, a member of the Awards Committee, presented the committee's nominations as follows:

Distinguished Service Award—Oscar O. Miller, M.D., Louisville.

Outstanding General Practitioner Award—Owen Pigman, M.D., Whitesburg.

Report of the Secretary—Reference Committee No. 1.

Report of the Editor—Reference Committee No. 1.

Report of the Treasurer—Reference Committee No. 1.

Report of Delegates to AMA—Reference Committee No. 1.

Report of Executive Secretary—Reference Committee No. 1.

Committee to Study the Constitution and Bylaws—Reference Committee No. 4.

Committee on the Corporate Practice of Medicine

—Reference Committee No. 4.

Committee on Medical Education and Economics

—Reference Committee No. 2.

Medico-Legal Administrator—Reference Committee No. 5.

Advisory Committee to the Editor—Reference Committee No. 6.

Committee on Public Information and Service—Reference Committee No. 3, with the exception of the section entitled "Emergency Medical Service" on page 4, which will be referred to Reference Committee No. 6.

Committee on Physicians Placement Service—Reference Committee No. 7.

Committee on Legislation—Reference Committee No. 3.

Committee to Study Relations with Voluntary Health Groups—Reference Committee No. 5.

Special Committee on Medicare—Reference Committee No. 2.

Committee on Scientific Assembly and Arrangements—Reference Committee No. 2.

Committee on Emergency Medical Service—Reference Committee No. 6.

McDowell Home Committee—Reference Committee No. 5.

Committee on Rural Health—Reference Committee No. 7.

Committee on Labor-Management Health Plans—Reference Committee No. 3.

Advisory Committee to Women's Auxiliary—Reference Committee No. 6.

Committee on Medical Services—Reference Committee No. 6, with the exception of paragraph C, section 1, page 1, to Reference Committee No. 2, and paragraphs 3 and 4, section III, page 2, to Reference Committee No. 3.

Committee on Allied Professions—Reference Committee No. 2, with the exception of two paragraphs on page 1 and ending with paragraph numbered 4 on page 2, is referred to Reference Committee No. 3.

KSMA Representative to Conference of Presidents and Other Officers of State Medical Associations—Reference Committee No. 5.

KSMA Representatives on Joint Commission for Improvement of Patient Care—Reference Committee No. 7.

KSMA Adviser to University of Louisville Student AMA Chapter—Reference Committee No. 6.

Advisory Committee to Selective Service—Reference Committee No. 4.

Professional Relations Committee—Reference Committee No. 2.

Report of Woman's Auxiliary—Reference Committee No. 6.

Board of Directors of the Kentucky Physicians Mutual, Inc.—Reference Committee No. 5.

Rural Kentucky Medical Scholarship Fund—Reference Committee No. 7.

The Speaker announced that the "Recommendation of Constitution Change," report No. 36 in the handbook, would be voted on for final passage at the second session of the House of Delegates on Wednesday night.

New business was then presented by the Speaker and referred to the Reference Committees as follows:

- (A) Resolution of Jefferson County Medical Society concerning expenses to the American Medical Association meetings for delegates or their alternates—Reference Committee No. 5.
- (B) Resolution of Jefferson County Medical Society concerning amendment to Article VIII of the Constitution—Reference Committee No. 4.
- (C) Resolution of Jefferson County Medical Society concerning amendment to Article V of the Constitution—Reference Committee No. 4.

- (D) Resolution of Christian County Medical Society commending Medicare—Reference Committee No. 2.
- (E) Resolution of Jefferson County Medical Society to commend the Louisville Retail Drug-gists Association—Reference Committee No. 3.
- (F) Resolution of Jefferson County Medical Society concerning establishment of a premature infant center in Louisville—Reference Committee No. 7.
- (G) Resolution of Jefferson County Medical Society to change Medicare from a fixed-fee plan to a fee-for-service plan—Reference Committee No. 2.
- (H) Resolution of the Committee on Mental Hygiene and Institution of the Kentucky State Medical Association concerning a separate Department of Mental Health with Commissioner Reporting to Governor—Reference Committee No. 6 as a part of the report from the Committee on Medical Services.
- (I) Resolution of the Boyd County Medical Society concerning care of eyes of newborn babies—Reference Committee No. 6.

The Speaker designated meeting places for the Councilor District Nominating Committees and the General Nominating Committee. He announced that the recommendations for the State offices would be announced the next day at the beginning of the second scientific session, that they would be read at the Wednesday night session of the House, and at that time additional nominations might be made from the floor without discussion or comment.

There being no further business a motion was made and seconded that the meeting adjourn at 10:15 p.m. The motion carried.

Second Session

The second session of the Kentucky State Medical Association House of Delegates was called to order on Wednesday, September 18 at 7:15 p.m., by the Speaker, Clyde C. Sparks, M.D., in the Columbia Auditorium, Louisville. After the invocation given by Rabbi Herbert S. Waller of Temple Adath Israel, W. P. McKee, M.D., Vice Chairman of the Credentials Committee, reported that a quorum was present.

Hugh Mahaffey, M.D., Chairman of the Council, presented the final report of the Council as follows:

The Council passed the following resolution at its September 18 meeting:

"WHEREAS, the 1957 Annual Meeting of the Kentucky State Medical Association has been well attended and generally accepted as being one of the outstanding meetings that this Association has held, and

"WHEREAS, the Committee on Scientific Assembly and Arrangements, our guest speakers, twelve cooperating Specialty Groups and all others worked together so successfully in developing an outstanding scientific program, and

"WHEREAS, the University of Louisville has developed, and presented a most profitable color TV program of eight and one half hours in length, and

"WHEREAS, the Smith, Kline and French Laboratories, at considerable expense, used their color TV broadcasting facilities to greatly enhance the effectiveness of our meeting, and

"WHEREAS, the Columbia Auditorium, the Brown Hotel, along with many other organizations and individuals, have cooperated to help make this meeting

successful,

"NOW THEREFORE, BE IT RESOLVED, that the House of Delegates of the Kentucky State Medical Association go on record as expressing its deep appreciation to all individuals and organizations that had any part in developing and presenting the 1957 Annual Meeting.

Mr. Speaker, I move the adoption of this resolution. The motion was seconded and carried.

At this point, the Speaker announced that if it pleased the House he would entertain a motion to limit the time of debate. A motion was made and seconded that the time limit on debate be five minutes for each member on any one issue. The motion carried.

The reports of the Reference Committees were presented at this time.

REFERENCE COMMITTEE NO. 1

Rankin C. Blount, M.D., Chairman
Reports of Officers and Councilors

Report of the President

The President pointed out the highlights of his year in office and the importance of the many aspects of Association business in which, as President, you become so closely associated. He mentioned matters in connection with legislation, the benefits from AMA membership, the problem of communications, and the volume of work handled by the Headquarters office. The President visited eleven Councilor districts and recommended that the bylaw change making it mandatory for each Councilor district to hold at least one meeting a year at which non-scientific problems were discussed, be accepted. Other recommendations had to do with having one open meeting of the Council each year at which any member could attend; that the Awards Committee be authorized to establish an appropriate recognition for a lay person who had made contributions to public health; that the Council be requested to give the committee structure of KSMA further study; that the Editor and Advisory Committee to the Editor of The Journal of KSMA be commended for their good work; that the Rural Kentucky Medical Scholarship Fund be commended for the good work it has done and that the House of Delegates express its appreciation to the Governor and the Legislature for its support of the Fund. He expressed his appreciation to the Council, the Secretary, the Committees and agencies of the Association, and the Headquarters staff for their loyal support and cooperation during his tenure in office.

This report deals with the report of the President except that portion on page 4, paragraph 3, which has been referred to Reference Committee No. 3.

It was felt that the recommendation of Doctor Slucher that at least one meeting of the Council each year be regarded as an open meeting, and so advertised, be approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

The Committee approved the recommendation that the House of Delegates ask the Council to give our Committee structure further study and make recommendations to the 1958 session of the House of Delegates.

M. Speaker, I move that this section of the report be adopted.

The motion was seconded and carried that this section of the report be adopted.

The commendation of the Legislature and the Governor for their support of the Rural Kentucky Medical Scholarship Fund was heartily endorsed.

Mr. Speaker, I move that the House of Delegates express its appreciation to the Legislature and the Governor for their support of the Rural Kentucky Medical Scholarship Fund.

The motion was seconded and carried that this section of the report be adopted.

The Committee wishes to commend Doctor Slucher for the capable way in which he has carried out his duties as President of this Association.

Mr. Speaker, I move the adoption of this section of the report as a whole.

The motion was seconded and carried that the Report of the President, as a whole, be adopted.

Report of the President Elect

The President Elect briefly summarized his activities for the year, among which was his attendance at the Cincinnati Academy of Medicine Centennial as a representative of the Kentucky State Medical Association. He said further that he hoped to have a fruitful year, and thanked the Kentucky State Medical Association for the trust placed in him as the next President.

The activities of the President Elect during the past year were noted by this Committee and we would like to assure him the support of all the members of this Association in the arduous task which lies ahead.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the President Elect be adopted.

Report of the Speaker

The Speaker of the House of Delegates reported that he had found his duties enjoyable and made easier by the efficient handling of routine material by the Headquarters office, that the Secretary had been most cooperative, and he wished to express appreciation to the legal counsel for the splendid cooperation shown and his readiness to assist. He said that one special meeting of the House had been held at which the Medicare program had been adopted. He commended the Vice Speaker for his capable help and said that the responsibilities of his office had been discharged.

This report was read and approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Speaker of the House of Delegates be adopted.

Report of the Chairman of the Council

The report of the Council was presented by Hugh Mahaffey, M.D., Chairman, and consisted of a brief resumé of the highlights of the year, according to a recommendation adopted at the 1956 meeting of the House. The report is as follows:

Report of the Council to the

1957 Session of the House of Delegates

Accepting a recommendation of Reference Committee No. 1 without dissenting vote at the second session of the 1956 meeting, the House of Delegates authorized the Council of the KSMA to print a digest of its actions in The Journal of KSMA following each meeting. The same action called for the Chairman to "read to the House of Delegates a brief resumé of the highlights of the previous year."

A digest of the minutes of each meeting of the Council has been printed in the Journal of KSMA. These digests included many recommendations from the Executive Committee of the Council that had been carefully studied before passing on to the Council. The Executive Committee of the Council held three meetings during the year and the Council has held four. Minutes of both the Executive Committee and the Council are on file in the Headquarters Office of the Association and may be viewed by any member at any time. A resumé of the highlights of Council actions for the 1956-1957 Association year follows:

FIRST MEETING. The Council held its first and organizational meeting of the new year Thursday, September 20, 1956 at the Brown Hotel. As is the custom, the KSMA Secretary, newly elected Woodford B. Troutman, M.D., Louisville, served as temporary chairman.

Hugh Mahaffey, M.D., Richmond, was elected Chairman of the Council. His first act was to recognize new members of the Council who were present: Ralph D. Lynn, M.D., Third District, and Charles C. Rutledge, M.D., Hazard, Fourteenth District. Other new members unable to be present were: Norman Adair, M.D., Covington, and the three new Vice Presidents, Carl Norfleet, M.D., Somerset, Karl Winter, M.D., Louisville, and Charles Yancey, M.D., Hopkinsville.

L. O. Toomey, M.D., Bowling Green was elected Vice Chairman of the Council. The Council then proceeded to set up the new Executive Committee, electing Walter L. O'Nan, M.D., Henderson and Carlisle Morse, M.D., Louisville, to serve with the Chairman and Vice Chairman of the Council, together with the President, President Elect and Secretary of the Association.

The Chairman then told the Council due to bylaw changes the House of Delegates voted the night before, that the office of Editor had been separated from the Secretary and that the Editor would be elected by the Council. Guy Aud, M.D., Louisville, was unanimously chosen. The Chairman also stated that bylaw changes voted by the House made the Executive Secretary an employee of the Council, and would hold office at the pleasure of the Council. J. P. Sanford was unanimously elected to this position.

SECOND MEETING. The second meeting of the Council, a day-long session, was held December 13, 1956 at the Brown Hotel in Louisville with twenty members present. Among actions taken was the acceptance of a modified statement of the AMA's proposal on guides for operation of grievance committees prepared by KSMA attorney, E. Gaines Davis, the appointment of the Legislative Committee, and the approval of recommendations toward improving The Journal of KSMA.

William R. Willard, M.D., Vice President of the University of Kentucky for the Medical Center, was heard. After discussing plans for the new Medical College at the University of Kentucky, Doctor Willard told of proposed plans President Dickey had for appointing a medical advisory committee for the new college which, for the most part, would be made up of physicians named by the Council of KSMA, with each Councilor District represented. The request was

accepted and the nominees chosen in accordance with Council action were sent to Doctor Willard. (This committee was appointed and the names have been published.)

The Council was told the four-year terms on the State Board of Health held by Thomas P. Leonard, M.D., Frankfort, and R. W. Robertson, M.D., Paducah, would expire December 31, 1956. The Council accepted Executive Committee recommendations that the following nominations be sent to Governor Chandler for the position now held by Doctor Leonard:

Thomas P. Leonard, M.D., Frankfort
H. Burl Mack, M.D., Pewee Valley
Robert L. Rice, M.D., Richmond

and for the position held by Doctor Robertson:

Robert W. Robertson, M.D., Paducah
Delmas M. Clardy, M.D., Hopkinsville
William L. Woolfork, M.D., Owensboro

The Council authorized the appointment of a committee to consider the relocation of the Headquarters Office, appointed a Medicare Review Committee and heard remarks by the Editor and the Health Commissioner.

The Headquarters Office was authorized to express the deep appreciation of the Council and Association to the Kentucky Pharmacy Association for purchase of adjoining property to the McDowell House for its use and to the Eli Lilly Foundation for the generous contribution it had made for the restoration of the Apothecary Shop as a part of the McDowell property.

THIRD MEETING. On April 4 at the Phoenix Hotel in Lexington, the Council held its third meeting with twenty members present.

Proposed budget for the 1957-58 year, developed by a day-long meeting of the Budget Committee and recommended by the Executive Committee, was presented by Doctor Toomey and approved by the Council.

Report of the Relocation Committee, made by the Chairman, Doctor Morse, and approved by the Executive Committee calling for the removal of the Headquarters Office to the new Medical Arts Building, 1169 Eastern Parkway, Louisville, was accepted. Health Commissioner Teague congratulated the Council on accepting the report and regretted that there was not adequate space in the Health Department building to house the expanding services of the Headquarters Office.

The Council was told that there would be two vacancies on the Hospital Licensure Council July 30, 1957, and that these positions were currently held by C. C. Howard, M.D., Glasgow, and Hershell B. Murray, M.D., West Liberty. The Council accepted the recommendations of the Executive Committee that the following three nominations be sent to Governor Chandler for the position now held by Doctor Howard:

C. C. Howard, M.D., Glasgow
Jesse T. Funk, M.D., Bowling Green
William H. Barnard, M.D., Elizabethtown

The position held by Doctor Murray had the following nominees:

Hershell B. Murray, M.D., West Liberty
Joseph M. Bush, M.D., Mt. Sterling
Frank Duncan, M.D., Monticello

The Council, following discussion of difficulties growing out of holding the KSMA Annual Meeting in September, authorized the appointment of a committee to study the possibilities of changing the date of the Annual Meeting and report back to the Council.

KSMA attorney was authorized to continue to look into the law to see if it were possible to set up a locked facility for TB patients without taking the matter to the Legislature.

A report from the Committee on Medical Education and Economics relative to the study of the accreditation of hospitals in Kentucky by the KSMA

Hospital Committee was authorized.

A resolution from the Jefferson County Medical Society calling for a study by the Council of making the payment of AMA dues mandatory by KSMA members and accepted by the 1956 House of Delegates was considered. The Council referred the matter to the Committee on Medical Education and Economics for investigation and study. It was the report of this Committee, on the basis of the growing AMA members with the KSMA and other considerations, recommended the payment of AMA dues by members of KSMA not be made mandatory. These recommendations were approved by the Council and authorized the recommendation be passed to the House of Delegates.

The Council authorized the Committee on Postgraduate Medical Education, together with the Headquarters Office to continue the study of the possibility of arranging for postgraduate closed circuit television programs, which would be sent to various parts of the State.

FOURTH MEETING. The Brown Hotel in Louisville was the scene of the fourth meeting of the Council held on July 18, 1957. This was a day-long session.

The Council accepted a report of a committee headed by KSMA's Historian, Emmett F. Horine, M.D., calling for the giving of portraits owned by the Association of A. T. McCormack, M.D., and Philip Blackerby, M.D., to the Health Department. Two other portraits of Ephraim McDowell, M.D., and J. N. McCormack, M.D., would be placed in the Historical Society for exhibition, but with the title for these two valuable portraits remaining with the Association.

Because of difficulties of meeting governmental requirements for a "qualified" pension plan for KSMA staff employees, the Council accepted a recommendation of the Executive Committee that the plan be changed to "non-qualifying" type.

The relative values of a basic science law and possible influence it might have on improving medical care in Kentucky was discussed. Information presented through the Legislative Committee of the Eye, Ear, Nose and Throat Section of KSMA was presented. The Council took no action pending the further investigation of the matter.

The Council was told that the Executive Committee had accepted the recommendations of the KSMA Committee on Labor-Management Health Plans of which Clyde C. Sparks, M.D., Ashland, is Chairman, which reads as follows: "That the Council conduct an investigation as to whether or not unethical practices are being carried on in the State of Kentucky by any group engaged in sponsoring medical care programs." As a result of the Executive Committee action, each county medical society was asked to present in writing any evidence it had in this connection.

Before the evidence was considered, the "Suggested Guides for Relations Between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund," as passed by the AMA House of Delegates at its June, 1957 meeting in New York, were read, thoroughly discussed and adopted by the Council. These "Guides" are as follows:

"1. All persons, including the beneficiaries of a third-party medical program such as the UMW Fund, should have available to them good medical care and should be free to select their own physicians from among those willing and able to render such service.

"2. Free choice of physician and hospital by the patient should be preserved:

"a. Every physician duly licensed by the state to practice medicine and surgery should be assumed at the outset to be competent in the field in which he claims to be, unless considered otherwise by his peers.

"b. A physician should accept only such terms or conditions for dispensing his services as will insure his free and complete exercise of independent medical judgment and skill, insure the best quality of medical care, and avoid the exploitation of his services for financial profit.

"c. The medical profession does not concede to a third party, such as the UMWA Welfare and Retirement Fund, in a medical care program, the prerogative of passing judgment on the treatment rendered by physicians, including the necessity of hospitalization, length of stay, and the like.

"3. A fee-for-service method of payment for physicians should be maintained except under unusual circumstances. These unusual circumstances shall be determined to exist only after a conference of the liaison committee and representatives of the Fund.

"4. The qualifications of physicians to be on the hospital staff and membership on the hospital staffs is to be determined solely by local hospital staffs and by local governing boards of hospitals."

Following the reading of the evidence presented by county societies and discussion of other matters, the Council adopted the following motion:

"That it is the opinion of this Council of the Kentucky State Medical Association that hospitals operating under the Miners Memorial Hospital Association and physicians employed by the Memorial Medical Associates are not complying with the principles enunciated in the Suggested Guides submitted by the Committee on Medical Care of Industrial Workers and adopted by the House of Delegates of the American Medical Association and this Council."

In other actions, the Council voted to lend its support to a "Health Conference" as requested by Harold McPheeters, M.D., Commissioner of the State Department of Mental Health which would look toward the recruitment of young people in the various allied health fields. Also, it authorized a study of health exhibits for the 1957-1958 State Fair and heard it was not necessary to pass legislation to set up a locked facility within the TB organization.

A recommendation of the Board of Directors of the Kentucky Academy of General Practice asked that the Council of KSMA work "for the passage of legislation to the effect that all hospitals or clinics in Kentucky operating under the status of non-profit institutions, be required to accept ten to fifteen per cent indigent patients for treatment."

Respectfully submitted,
Hugh Mahaffey, M.D.
Chairman of the Council

Supplemental Report of the Council

The Council has considered the matter of changing the date of the Annual Meeting very carefully. Reasons for this consideration are:

1. It is very often uncomfortably warm in many of the meeting rooms during the time our sessions are now being held.

2. The difficulty in obtaining reports from committee members during the vacation season.

3. Many of the county societies do not meet during the summer and often do not instruct their delegates.

4. Often competition is very close in the big league baseball finish and diverts interest on the part of those attending the meeting.

5. Prevents the Headquarters Office personnel from taking vacations during the normal vacation season.

The Council recommends that the time of the Annual Meeting be changed to a date during the last two weeks in May, provided such a date can be worked out with the local auditorium, hotel, Chamber of Commerce and other groups, or that the Executive Committee of the Council be empowered to fix this date, if this recommendation is approved.

The Council discussed at some length the advantages of having a standard insurance form, pointing out that it would save much time, provide uniform information, and it was the experience of the Campbell-Kenton County Society members that 95% of the insurance companies would accept a reasonable form.

Following careful consideration, the Council voted to recommend to the House of Delegates that a short insurance form as used by the Campbell-Kenton Medical Society and the Academy of Medicine of Cincinnati be adopted as a standard insurance form to be used by members of this Association.

The Report of the Council was considered with the exception of the last paragraph on page 5, continued on page 6, and the second paragraph on page 7, continued through page 8, which were referred to other Reference Committees.

That portion of the Council report submitted as a supplemental report dealing with standard insurance forms was studied and it is recommended that the Headquarters staff contact the Commissioner of Insurance for the State of Kentucky, and all insurance companies doing business in the Commonwealth, in an effort to standardize and simplify the forms required to be filled out by physicians.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

The supplemental report by the Council dealing with a change in the date of the Annual Meeting of this Association was considered and by a unanimous vote was disapproved for the year 1958. It was suggested that the Council continue to study this problem and submit a report to the 1958 session of the House of Delegates.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried.

Mr. Speaker, I move the adoption of this section of the report as a whole.

The motion was seconded and carried that the report of the Council be adopted.

Report of the Secretary

The Secretary reported that three membership lists were included in his report, one covering the deceased members during the past year, the official membership, and new members for the last year. The Secretary had attended a number of meetings and worked closely with the Executive Secretary. He mentioned three major developments in Association activity during the past year. The first was a special meeting of the House of Delegates on Medicare in November; the second was the National Conference on Rural Health in March; and the third was moving the Headquarters office to a new location.

The report of the Secretary was approved and the Committee wishes to commend him on his brief report and the diligent way in which he has carried out his duties.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Secretary be adopted.

Report of the Editor

The Editor reported that The Journal has continued to make progress during the past year and one new department, the Public Health Page edited by Russell E. Teague, M.D., Commissioner of Health, had been added. He pointed out that financially The Journal had a good year and had received some very nice compliments through the State Medical Journal Advertising Bureau. The Editor expressed appreciation for the services of the Advisory Committee to the Editor, the Scientific Editors, the Board of Consultants and the Advertisers.

The report of the Editor was approved and the Committee would like to commend him and his staff for improved financial status of The Journal as well as the over-all improvement in the quality of The Journal.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Editor be adopted.

Report of the Treasurer

The Report of the Treasurer contained the audit of Christen, Brown, McCroskey and Rufer, Certified Public Accountants, of the Association's financial situation for the fiscal year ending June 30, 1957.

The report of the Treasurer was approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Treasurer be adopted.

Report of the Kentucky Delegates to AMA

The KSMA Delegates to the AMA gave a very complete and informative report on their activities for the past year. The Clinical Meeting of the AMA held in Seattle, Washington, November 27, was attended by W. Vinson Pierce, M.D., and Robert Long, M.D., alternate to Doctor Bailey who was prevented from going. Doctors Bailey and Pierce attended the AMA New York Meeting in June, at which David B. Allman, M.D., Atlantic City was inaugurated as President, and Gunnar Gundersen, M.D., LaCrosse, was elected President-Elect. Revision of the principles of medical ethics, relations with United Mine Workers of America Welfare and Retirement Fund, federal government's Medicare program, new standards for medical schools, new statement on occupational health programs, and the issue of social security benefits for physicians were among the wide variety of subjects acted upon by the House of Delegates of the American Medical Association. At this New York meeting the "Suggested Guides to Relationships Between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund" were adopted.

The Committee studied the report of the Delegation to AMA and found it to be very informative in regard to the present day problems of organized medicine and feels that Kentucky was most capably represented by Clark Bailey, M.D., Vinson Pierce, M.D., and Robert Long, M.D.

Mr. Speaker, I move you the adoption of this section of the report.

The motion was seconded and carried that the Report of the Delegates to the AMA be adopted.

Report of the Executive Secretary

The Executive Secretary in his report endeavored to give a brief look at the volume and kind of work emanating from the Headquarters Office. This office,

working under the immediate direction of the Council, makes preparations for the Annual Meeting which constitute the largest single activity of the year; collect material for The Journal, both scientific and non-scientific, screen advertisers, meet all deadlines and get The Journal out on time; promote Councilor District meetings; operate a Physicians Placement Service; handle Rural Kentucky Medical Scholarship Fund beneficiaries; and arranges for committee meetings at the direction of the various committee chairmen. Under the supervision of the Secretary, the Secretary's Letter and News Capsules are mailed to members monthly, and such other publications as are sent for distribution by the AMA or related agencies. Under the supervision of the Senior Day Committee, this important Association project is promoted and developed with the aid of the Jefferson County Medical Society and the University of Louisville School of Medicine. Under the direction of the Council and the President, the County Society Officers Conference, the second largest meeting of the Association, is another project involving much time on the part of the Headquarters Office. The Executive Secretary has attended at least one meeting in each Councilor District holding meetings during the year, two meetings of the Board of Trustees of the Rural Kentucky Medical Scholarship Fund, five meetings of the Kentucky Physicians Mutual, Inc., and has met with all committees holding meetings during the past year. He has attended four national meetings on behalf of KSMA which include the American Medical Association Meeting, the Annual Meeting of the Medical Society Executives Conference, the National Public Relations Institute, and a meeting in Washington on Medicare. The resignation of John Guy Miller as Field Secretary and his replacement in the person of Bobbie R. Grogan, who is making splendid progress in his new capacity, was reported. The Executive Secretary expressed his appreciation to the President, the Chairman of the Council and the members of the Council and Executive Committee, the Secretary, the Editor and the staff of the Headquarters Office for their cooperation and assistance during the Associational year.

The Committee noted the many activities engaged in by the Executive Secretary and wishes to commend him for a job well done as usual.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Executive Secretary be adopted.

Mr. Speaker, I move the adoption of the report of Reference Committee No. 1 as a whole.

The motion was seconded and carried that the Report of Reference Committee No. 1, as a whole, be adopted. The Chairman thanked the members for their assistance.

Signing the report of Reference Committee No. 1 were: Rankin C. Blount, M.D., Lexington, chairman; H. E. Martin, M.D., Ashland, vice chairman; W. C. Hambley, M.D., Pikeville; Loman Trover, M.D., Madisonville; Rudy Vogt, M.D., Louisville.

REFERENCE COMMITTEE NO. 2

Richard G. Elliott, M.D., Chairman
Reports on Medical Care, Medical Education,
Hospitals and Related Subjects

Report of the Committee on Medical Education and Economics

The Committee on Medical Education and Economics reported on the Veterans Administration contract for home care of veterans with service connected disabilities; a resolution requesting compulsory AMA membership as a requisite to KSMA, referred by the Council; a recommendation that the Council appoint a hospital accreditation committee within KSMA; action as liaison agent to the Governor's Committee on Indigent Care; and consideration of the Council's actions in setting up an Advisory Committee to the University of Kentucky Medical Center.

Doctor Garrett's Committee recommended that the contract between the Veterans Administration and the KSMA for home care of veterans be renewed. They recommended that the following statement of policy be adopted:

(1) That the Veterans Administration and veterans organizations are jeopardizing the proper care of the veterans with service connected disabilities by demanding free medical care for non-service connected cases.

(2) That it is highly improper for the Veterans Administration to operate in such a way as to cause them to be classed as indigent patients; that the law should be changed and regulations so written that non-service connected patients who are veterans would not be admitted to veterans facilities if they were able to pay.

Mr. Speaker, I move that the House of Delegates endorse the above recommendations.

The motion was seconded and carried that the recommendations of Committee on Medical Education and Economics be adopted.

The Committee on Medical Insurance had no positive action.

The Committee on the University of Louisville Medical School and the Committee on World Medical Association made no report.

The Committee voted not to recommend the resolution requesting compulsory AMA membership as a requisite to membership in the KSMA.

Mr. Speaker, I move that membership in the AMA will not be a requisite to membership in the KSMA.

The motion was seconded and carried that compulsory membership in the AMA not be adopted.

It was recommended that an Advisory Hospital Accreditation Committee be appointed within the KSMA to:

(1) Urge hospitals not accredited to qualify for and become accredited.

(2) Serve as a liaison between the National Accreditation Inspectors and hospitals inspected and where approval is withheld, serve as an appeals board when requested.

This Reference Committee recommends that the Council appoint such a Committee.

This Committee served as liaison between the Governor's Committee on Indigent Care and the KSMA, which is currently formulating a program for use in writing a legislative bill

for the next General Assembly for indigent medical care.

Supplementary Report: The following is the organization of the indigent care program at present:

The administrative part of the program will be handled by the Department of Economic Security.

The professional part of the program is directed by the Department of Health, with the assistance of a locally appointed Medical Advisory Committee.

Over-all supervision will be through the Advisory Council for Indigent Medical Care and the Technical Committees on Medical, Dental, Hospital, Nursing, Drugs, Nursing Homes, and other organizations.

These members are all appointed by the Governor from lists submitted by their respective organizations.

We wish to commend this Committee for its excellent work and are sure that a workable plan of indigent care will be designed.

The Committee also considered the Council's participation in setting up the Advisory Committee at the Medical Center in Lexington last spring. They felt that in the future such recommendations should come from the House of Delegates.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Committee on Medical Education and Economics be adopted.

Report of the Special Committee on Medicare

The Special Committee on Medicare reported on Public Law No. 567 which went into effect December 7, 1956 and had to do with medical care to dependents of active uniformed military personnel.

Public Law 567 pertaining to Medicare went into effect December 7, 1956. Although many did not like the trend, it is felt that it was a law and, therefore, the different states were asked to support it. This law covers dependents of active uniformed military personnel. Its purpose was to:

(1) Reduce the doctor draft.

(2) Reduce the load on military hospitals, and

(3) Give a "fringe benefit" to military personnel, thereby improving their morale.

This bill may eventually cover the medical care of five per cent of the population.

A fee schedule was developed by the Committee, passed by the House of Delegates and was then submitted to Washington for approval. In November 1956, at a special meeting of the House of Delegates the KSMA approved the fee schedule as negotiated in Washington, the Blue Shield being designated as the fiscal agent. It is emphasized that there is no connection between the Medicare and the Blue Shield programs. Any unusual cases which require extra or special attention may be submitted to the State Review Committee for approval of fees

not covered by the schedule. The program has functioned very smoothly during the past year.

Mr. Speaker I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Special Committee on Medicare be adopted.

Report of the Committee on Scientific Assembly and Arrangements

The Committee on Scientific Assembly and Arrangements reported on its main meeting held in December of 1956 in connection with plans for the 1957 Annual Meeting. The Chairman also met with the twelve Specialty Group presidents, and included in his report the reports of the Associate Committee on Scientific Exhibits and the Associate Committee on Technical Exhibits, together with the report of the Associate Committee on Postgraduate Medical Education.

The Committee has arranged an excellent scientific program for the 1957 Annual Meeting. Many nationally known figures will present papers, a closed circuit color TV program has been arranged by Doctor Rudy Noer, and the specialty groups have prepared excellent programs for the Wednesday afternoon session.

The Associate Committee on Scientific Exhibits is presenting 10 carefully selected scientific exhibits. The Committee on Technical Exhibits presents 65 carefully selected exhibitors. The delegates are urged to take advantage of both the scientific and the technical exhibits.

The Committee wishes to express its appreciation to the technical exhibitors for their support and to the members of this Association and the House of Delegates for their cooperation.

The Report of the Associate Committee on Postgraduate Medical Education. This committee will determine the needs in different areas of the State and plans to hold seminars there. It is recommended that the Committee act as a clearing house for postgraduate seminars and bring these matters to the attention of the KSMA House of Delegates.

The advisability of publishing an annual catalogue of postgraduate educational opportunities within the State has been discussed. This Reference Committee wishes to commend the Committee on Scientific Assembly and Arrangements for a most interesting annual meeting and feels that the annual catalogue of postgraduate educational opportunities within the State, as proposed by the Postgraduate Medical Education Committee will be an excellent publication.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the report of the Committee on Scientific Assembly and Arrangements be adopted.

Report of the Committee on Allied Professions

The Committee on Allied Professions reported that no meeting of this Committee had been held

during the year due to the fact that no business had been referred to it, nor had there been a request on the part of any member for a meeting. However, reports of its Associate Committees were included.

(With the exception of paragraphs numbered 1 and 2 on page 1, and paragraphs numbered 3 and 4 on page 2, which were referred to another Reference Committee.) The Committee on Medical Education and Economics recommended to the Council, which in turn referred the matter to this Committee, the subject of accreditation of hospitals by state accreditation machinery. The Committee considered the mandate of the Council in taking up the matter of accreditation of small hospitals in the State and the difficulty which small hospitals may have in meeting the high standards of the Commission on Accreditation. After considering the many difficulties of such a plan, the Committee is very reluctant to implement this program, while in complete sympathy with the philosophy which is back of the recommendations.

This Reference Committee does not feel that any action should be taken on this matter.

The Associate KSMA Pharmacy Committee, the Associate Committee on School Health and the Associate Committee on Nursing Training had nothing referred to them this year. The Associate Advisory Committee to Blue Cross met and discussed the policy of that organization.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Committee on Allied Professions be adopted.

Report of the Committee on Professional Relations

The report of the Committee on Professional Relations stated that less actual work was performed by it due to two things: First, a consciousness on the part of the profession to maintain a high standard of doctor-patient relationship and second, a better understanding between doctor and patient. The Committee was impressed with the necessity of the profession understanding better the concept of medical service rendered in the light of the moral and socio-economic phases.

This Committee had little to do this year due to a consciousness on the part of our profession to maintain a high standard of doctor-patient relationship and a better understanding between the doctor and the patient in each individual case. The Committee is not in sympathy with the physician who overcharges for his services. The Reference Committee agrees in full with the above and feels that these principles should be practiced by all of our members.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Committee on Professional Relations be adopted.

Report of the Committee on Medical Services

(Page 1, Section I, Paragraph c.)

The above mentioned section of the report of the Committee on Medical Services was referred to this Reference Committee.

The Board of Directors of the Kentucky Division of the Cancer Society recently passed a resolution that:

- (1) The hospitalization program be discontinued in 1960 and no more of its funds be allocated after that date to the treatment of indigent cancer patients in Kentucky.
- (2) On July 17, 1957, the Board of Directors met with the Governor's Committee on the Medically Indigent in Kentucky for a preliminary discussion of this problem.
- (3) The Advisory Committee on Cancer of the KSMA endorsed the position that provision should be made by the State to take care of this class of patient.

Mr. Speaker, I move that the KSMA recommend to the Governor's Committee for the Study and Treatment of the Medically Indigent in Kentucky, that provision be made for the treatment of indigent cancer patients in the State.

The motion was seconded and carried that this section of the Report of the Committee on Medical Services be adopted.

Resolution D—Commending Medicare

"WHEREAS, Fort Campbell is partly in Christian County and in close proximity to Hopkinsville, and
"WHEREAS, There are many dependents of Armed Forces personnel in Hopkinsville and Christian County, and

"WHEREAS, Before the advent of "Medicare," compensation for medical service to dependents of Armed Forces personnel was most unsatisfactory, and

"WHEREAS, Since the advent of "Medicare" the medical care of dependents of Armed Forces personnel has become a pleasure and an asset to the physicians of Christian County in that there is free choice of physicians, adequate fees, and our own contractual and fiscal agents and our own Board for review of the complicated cases, and

"WHEREAS, The physicians of Christian County are experienced in dealing with care of Armed Forces personnel, before and after the advent of "Medicare,"

"NOW, THEREFORE, BE IT RESOLVED, That the Christian County Medical Society go on record as approving the system of medical care of the dependents of Armed Forces personnel known as "Medicare" and that we owe a debt of gratitude to those responsible for devising such a system, and

"BE IT FURTHER RESOLVED, That we implore the House of Delegates of the Kentucky State Medical Association not to take any action that would jeopardize the smooth functioning of "Medicare" or injure the relations with the public, the Armed Forces personnel, and the Congress of the United States in this matter."

This resolution and the following resolution was considered in open hearing and there was a lengthy and detailed discussion of many points of the Medicare program.

This Reference Committee feels that the

Christian County Medical Society Resolution should not be adopted by the House of Delegates.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that Resolution D, introduced by the Christian County Medical Society commending Medicare, not be adopted, as recommended by this Reference Committee.

Resolution G—To Change Medicare From a Fixed-Fee Plan to a Fee-For-Service Plan

"WHEREAS, one should note that all physicians are completely in sympathy with a program for the best medical care for dependents of military personnel, as we are for everyone, but we must be consciously aware of the creeping inroads being made against the medical profession with the avowed aim of eventually placing us in the same position in which the British physician now finds himself, and

"WHEREAS, the members of the Kentucky State Medical Association desire that the Medicare Program be carried out on the American principle of freedom of choice of physician, and

"WHEREAS, Medicare is pure state socialized medicine and is, therefore, a prime threat to all American freedom, and

"WHEREAS, the freedom of choice of physician should allow a freedom of the physician to set his own fee, based, not on a standardized fixed-fee schedule, but on the patient's ability to pay commensurate with the services performed, and

"WHEREAS, a fixed-fee schedule tends toward mediocrity of services and provides a threshold for state medicine, and

"WHEREAS, beside the danger of further governmental extension into medical care, there is an inherent danger present in any contractual arrangement with third-parties that calls for fixed-fee schedules such as the Medicare contract and the danger mentioned is the "standardization of fees" which tends to a leveling or averaging-out process that will inevitably destroy individuality and initiative which are the very backbone of medical progress, and

"WHEREAS, the Kentucky State Medical Association has an excellent opportunity at this meeting to refuse to enter into any new contracts or agreements and to cancel any contracts or agreements of any nature that tend to prevent a normal fee-for-service doctor-patient relationship, and

"WHEREAS, the American Medical Association's principles of ethics states in section 7 that "his fee should be commensurate with the services rendered and the patient's ability to pay," and

"WHEREAS, the American Medical Association's principles of medical ethics states in section 6 "a physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care," and

"WHEREAS, the State of Florida has recently in an assembled state session noted to "not renew its fixed-fee Medicare contract when it expires" and instructed the officers of the Florida Medical Association to negotiate a new contract with the government, but not to accept any provision fixing the fees payable by the government for medical services rendered, and

"WHEREAS, the defeat of a compulsory health program cannot be accomplished by one county, or one state, but requires the full cooperation and support of every county, and every state Medical association, as well as every participating physician, and

"WHEREAS, the most powerful single weapon the medical profession has in its fight against the

socialization of medicine is the soul of each doctor who rejects state medicine and refuses to participate in it, and

"WHEREAS, under the present Medicare contract system, when one participates in Medicare, one works for the federal government, is paid by the federal government, and is not, therefore, a private physician, all of which is contrary to the best interests of the medical profession, and

"WHEREAS, every single regulation, fee, bill, statement, report, argument, or any other feature of Medicare is under the absolute, dictatorial power of a federal agency, and

"WHEREAS, it is the firm conviction of this House of Delegates that better medical care for dependents will be provided at a lower cost to the already overburdened taxpayer, now therefore,

"BE IT RESOLVED, that the present Medicare contract with its fixed-fee schedule in the State of Kentucky not be extended beyond its termination date of June 30, 1958, and further

"BE IT RESOLVED, that the Council of the Kentucky State Medical Association appoint a representative committee from among the members of the House of Delegates to negotiate a new contract based on a fee-for-service basis, and further

"BE IT RESOLVED, that the House of Delegates of the Kentucky State Medical Association be called into special session at least three months prior to the cancelling of the present contract, in order to approve a new contract embodying the principles of purposes contained in this resolution, and further

"BE IT RESOLVED, that the delegates of the Kentucky State Medical Association to the American Medical Association be instructed to work constantly toward the repeal of the Medicare contract as long as it is based in some states upon a fixed-fee schedule rather than upon a fee-for-service basis."

This Reference Committee wishes to offer the following amendment to this resolution:

That Paragraph 8, page 2, be amended by striking out the words, "with its fixed-fee schedule" to read, "BE IT RESOLVED, that the present Medicare contract in the State of Kentucky not be extended beyond its termination date of June 30, 1958"; and to amend Paragraph 9, page 2 by the addition of the words, "if legally possible" after the word "basis," to read, "BE IT RESOLVED, that the Council of the Kentucky State Medical Association appoint a representative Committee from among the members of the House of Delegates to negotiate a new contract based on a fee-for-service basis if legally possible."

Mr. Speaker, I move the adoption of the amendment as read.

The motion was seconded and carried that the amendment as read be adopted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that Resolution G, as amended, be adopted.

The Chairman wishes to thank his Committee for their hard work and their cooperation and the many members of the KSMA who appeared to give us their views on the subjects under discussion.

Mr. Speaker, I move the acceptance of the report as a whole.

The motion was seconded and carried that the Report of Reference Committee No. 2 be

adopted as a whole. The Chairman thanked the members for their assistance.

Signing the report of Reference Committee No. 2 were: Richard G. Elliott, M.D., Lexington, Chairman; Foster Coleman, M.D., Louisville, Vice Chairman; G. L. Rouse, M.D., Florence; G. R. Tanner, M.D., Fort Thomas; Johnny Reynolds, M.D., Winchester.

REFERENCE COMMITTEE NO. 3

Thomas Gilbert, M.D., Chairman
Reports on Legislation and Public Relations

Report of the President

(Page 4—Awards)

The President, in his report, stated that there were many people not in the medical profession who make splendid contributions to public health each year, and he recommended that the Awards Committee be authorized to establish appropriate recognition.

This section of the Report of the President was approved in principle, but the question was brought up by the Committee as to whether the award should be made annually or only when it was especially warranted.

Mr. Speaker, I move that this section of the report be approved in principle, but that it be referred to the Council for further study.

The motion was seconded and carried that an award for persons not in the medical profession be referred to the Council for study be adopted.

Report of the Council

(Page 7 through 8—Guides)

It was reported by the Council that the "Suggested Guides for Relations Between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund," as passed by the AMA House of Delegates at its June, 1957 meeting in New York, were read, thoroughly discussed and adopted by the Council at its meeting held on July 18, 1957.

This portion of the Report of the Council was carefully studied and the Committee approved the action of the Council adopting the suggested guides to relationships between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund which was submitted by the AMA Committee on Medical Care for Industrial Workers and approved by the House.

Mr. Speaker, I move that the House of Delegates adopt these guides as the policy of the KSMA.

The motion was seconded and carried that the "Guides" be adopted as the policy of KSMA.

Mr. Speaker, I move the adoption of this section of the report in its entirety.

The motion was seconded and carried that this portion of the Report of the Council be adopted in its entirety.

Report of the Committee on Labor-Management Health Plans

The report of the Committee on Labor-Management

ment Health Plans stated that one formal meeting had been held during the year at which time it was recommended that a definition of the "corporate practice" of medicine be secured and that the Council conduct an investigation as to whether or not unethical practices are being followed in Kentucky by any group sponsoring medical care programs. A meeting of the liaison committee to the UMWFA Welfare and Retirement Fund was held in February with about forty in attendance, during which meeting a thorough and lengthy discussion of what constitutes ethical practices was gone into.

The report of this Committee and its Sub Committee, the Advisory Committee to the UMWFA Welfare and Retirement Fund was thoroughly studied and the Committee wishes to commend these doctors for the work which they have done toward investigating this great problem. We wish to stress the fact that all of our doctors should take the time to be informed as to these problems and that we try to assist the people in achieving their desires, keeping within the presently existing framework of medical practices, accepting no deviation from sound basic freedom, and that we offer our society as an assistant and consultant to labor and management in health matters now and in those to come under negotiation.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Committee on Labor-Management Health Plans be adopted.

Report of the Committee on Allied Professions

*(Page 1, Paragraph 3, Numbers 1 and 2;
Page 2, Numbers 3 and 4)*

This section of the Report of the Committee on Allied Professions had to do with the recommendation of the Committee on Hospitals in connection with the "Suggested Guides" and their adoption by the House of Delegates.

This section of the report was essentially the same as the section of the Report of the Council which has been previously approved.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the section of the Report of the Committee on Allied Professions having to do with "Guides" be adopted.

Report of Public Information and Service Committee

The Committee on Public Information and Service reported that a number of projects had been carried on during the year, one of which was the indoctrination booklet "KSMA Benefits" which was sent to each newly licensed physician in Kentucky. News Capsules was commended for its return to the original plan, and it was felt that PR courses for doctors' assistants and secretaries should be suspended. Other major activities enumerated were: Senior Day held at the University of Louisville School of Medicine in the morning and at the Kentucky Hotel in the afternoon with the very able cooperation of the Dean of the University of Louisville School of Medicine and the Jefferson County Medical Society; The Kentucky State Fair exhibit on "How Bacteria Spread"; AMA Radio transcriptions broadcast by more than twenty radio stations, 17 of which will receive a special

certificate from the AMA for having used these programs for five years.

This report was read and the various activities of this Committee individually studied. The Committee wishes to commend the publication and distribution of the indoctrination booklet "KSMA Benefits." We also wish to compliment the editing of the "News Capsules" and feel that they should be continued in their present form.

We concur in the discontinuance of the PR Courses for Doctors' Assistants and Secretaries.

We thoroughly approve of the conducting of a Senior Day Program and wish to compliment the Committee and particularly to commend the Jefferson County Medical Society for their participation in this event.

We approve the exhibit at the Kentucky State Fair this year and recommend that a letter of appreciation be sent to Mr. Clyde Reeves for donating free space to the KSMA.

We approve the AMA radio transcriptions and the approach of the Committee to the American Association of Physicians and Surgeons Essay Contest.

Mr. Speaker, I move the adoption of this section of the report as a whole with the exception of Emergency Medical Services on page 4 which was referred to another committee.

The motion was seconded and carried that the Report of the Committee on Public Information and Service be adopted.

Report of the Legislative Committee

The Legislative Committee reported one meeting held during the past year and that the State Legislature was not in session. Its Associate Committee to Study the Medical Examiner System recommended that a model autopsy law be drawn up; that the Governor be approached in connection with setting up a fund for investigations where indicated; and that the Legislative Committee consider a bill covering the coroner system such as is now in effect in other states where an incumbent coroner, who does not succeed himself, can only be succeeded by a licensed physician.

This report was read and the Committee approved of the stand to support any approved legislation in the field of indigent care and of the support of the Jenkins-Keogh Bill in the House of Representatives on the national level.

The Committee concurs in the report and recommendations of the Associate Committee to Study the Medical Examiner System, but feels that there might be some problem in getting physicians to run for the office of coroner in some counties.

Mr. Speaker, I move that the House of Delegates instruct the Legislative Committee to consider (1) a model autopsy law in which any person obviously taking the responsibility for the deceased could sign a legal autopsy permit; (2) to empower the Committee to Study the Medical Examiner System to approach the Governor for setting up a fund for the performance of appropriate investigation and examination where indicated and to support such a move; (3) recommending that the Legislative

Committee consider a bill covering the coroner in other states wherein if the incumbent coroner does not succeed himself, he can only be succeeded by a licensed physician.

The motion was seconded and carried that the above recommendations be carried out.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Legislative Committee be adopted.

Report of the Committee on Medical Services (Page 2, Section III, Paragraphs 3 and 4)

The above mentioned section of the Report of the Committee on Medical Services recommends that a physical therapy act, such as exists in practically all other states, be suggested to the State Legislature, and that a State Licensure for physical therapists be established.

This section of the report was read and approved.

Mr. Speaker, I move that the matter be referred to the Associate Committee on Physical Therapy to work with the local chapter of the American Physical Therapy Association in suggesting a physical therapy act such as exists in practically all other states and in establishing a state licensure for physical therapists.

The motion was seconded and carried that the above recommendations be carried out.

Mr. Speaker, I move the adoption of this system such as that now in effect in Ohio and section of the report.

The motion was seconded and carried that this section of the Report of the Committee on Medical Services be adopted.

Resolution E—To Commend the Louisville Retail Druggists' Association

"WHEREAS, the pharmacists of the State of Kentucky have through the years been most closely allied with the profession of Medicine, and

"WHEREAS, the pharmacists have labored diligently for the betterment of the health of the people of our Commonwealth, and

"WHEREAS, the pharmacists have always endeavored to improve the relations of the patient with his physician, and

"WHEREAS, the Louisville Retail Druggists' Association in an effort to more fully acquaint the people of this state with some aspects of the medical and pharmacy professions did inaugurate a monthly full page of informational value in the Sunday Courier-Journal beginning in April of 1957, and

"WHEREAS, in the six issues of April 14, May 12, June 9, July 7, August 4, and September 1, this excellent, dedicated, hard working, and devoted group has contributed immeasurably toward the betterment of medical public relations, as well as improvement of inter-professional relations, therefore,

"BE IT RESOLVED, that this House of Delegates does express its appreciation to and does highly commend the Louisville Retail Druggists' Association for this series of public messages for their educational and public relations impact upon the citizens of the Commonwealth of Kentucky, and further,

"BE IT RESOLVED, that a copy of this resolution be sent to the President of the Louisville Retail Druggists' Association with the sincere thanks and appreciation of the Kentucky State Medical Association for their excellent and timely public service."

Resolution E, introduced by the Jefferson County Medical Society to commend the Louisville Retail Druggists Association, was read and unanimously approved.

Mr. Speaker, I move the adoption of this Resolution E.

The motion was seconded and carried that Resolution E be adopted.

Mr. Speaker, I move the adoption of this report as a whole.

The motion was seconded and carried that the Report of Reference Committee No. 3 be adopted. The Chairman thanked the members for their assistance.

Signing the report of Reference Committee No. 3 were: Thomas Gilbert, M.D., Bowling Green, Chairman; Carl Fortune, M.D., Lexington, Vice Chairman; A. B. Colley, M.D., Owensboro; John F. Greene, M.D., Sandy Hook; James Miller, M.D., Greensburg.

REFERENCE COMMITTEE NO. 4

Carl W. Kumpe, M.D., Chairman
Reports on Miscellaneous Business

Report of the Committee to Study the Constitution and Bylaws

The report of the Committee to Study the Constitution and Bylaws sets forth changes as recommended by it.*

Chapter VII, Section 10. Your Reference Committee approves the proposed change in Chapter VII, Section 10 of the bylaws as outlined in Report No. 10, pages 1 and 2, in connection with Medico-Legal Administrator.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter I, Section 1. Your Reference Committee approves the proposed change in Chapter I, Section 1 of the bylaws as outlined in Report No. 10, pages 3, 4, 5, and 6, in connection with Membership.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter XII, Section 15. Your Reference Committee approves the proposed deletion of Chapter XII, Section 15 of the bylaws as outlined in Report No. 10, page 6, in connection with Invited Associate Members.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter IX, Section 1. There was considerable discussion by the Reference Committee on the handling of "assessments and expenditures" that starts on page 6 of Report No. 10. Many members of the Kentucky State Medical Association appeared before the Committee pro-

*The Constitution and Bylaws, as amended, will be found on page 1136 of this issue.

testing that the Council should not have the power to fix dues and felt that this was unconstitutional, according to Chapter IX, Assessments and Expenditures, of the 1956 Constitution and Bylaws of the Kentucky State Medical Association, even though a precedent is outlined in the bylaws of the same Constitution.

The proposed change of the bylaws by the Committee to Study the Constitution and Bylaws on page 7 states:

"Chapter IX, Section 1. The annual dues for active members of this Association shall be thirty-five dollars, except that the council may by appropriate resolution, fix the dues of active members who devote all of their time to teaching or research and who have no private practice, at a lower sum. The council shall fix the dues of all other classes of members. Dues fixed by these bylaws or by the council pursuant thereto, shall constitute assessments against the component societies. The Secretary of each county society shall"

Your committee proposes that this Section be changed to read as follows:

"Chapter IX, Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Members, \$35.00, EXCEPT Active Members who devote all of their time to teaching or research and have no private practice, \$25.00; (2) Associate Members, \$8.00; (3) Inactive Members, \$8.00; (4) Emeritus Members, no dues; (5) Student Members, \$1.00; (6) Honorary Members, no dues. Dues fixed by these bylaws shall constitute assessments against the component societies. The Secretary of each county society shall"

Mr. Speaker, I move the adoption of this section of the report as revised by this Reference Committee.

A rather lengthy and thorough discussion ensued in which the question of the constitutionality of the change was challenged. On advice of the Parliamentarian, the Chair ruled that the amendment was germane to the question at hand, that it is not a change in the Constitution but is a change in the bylaws. The ruling of the Chair was appealed. Upon vote, the ruling of the chair was overwhelmingly upheld.

The motion was seconded and carried that this section of the report as revised by the Reference Committee be adopted.

Chapter XII, Section 5. Your Reference Committee approves the proposed change in Chapter XII, Section 5 of the bylaws as outlined in Report No. 10 on pages 7 and 8, in connection with selection of members.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter VIII, Section 2. Your Reference Committee approves the proposed change in Chapter VIII, Section 2 of the bylaws as outlined in Report No. 10, pages 8 and 9, in connection with Chairmen of the Committees on Scientific Exhibits and Technical Exhibits being members of the Committee on Scientific Assembly and Arrangements.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Chapter VII, Section 3. Your Reference Committee approves the proposed change in Chapter VII, Section 3 of the bylaws as outlined in Report No. 10 on pages 9 and 10, in connection with Councilor District meetings.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that this section of the report be adopted.

Mr. Speaker, I move the adoption of the Report of the Committee to Study the Constitution and Bylaws as revised by your Reference Committee No. 4 as a whole.

The motion was seconded and carried that the Report of the Committee to Study the Constitution and Bylaws as revised be adopted.

Report of the Committee on the Corporate Practice of Medicine

The Committee on the Corporate Practice of Medicine presented the following resolution to the House of Delegates for adoption:

"WHEREAS, upon the advice of attorney for the Kentucky State Medical Association the definition of corporate practice of medicine is as follows:

"The 'corporate' or 'third party' practice of medicine occurs when any unlicensed person, partnership, association or corporation purveys the services of a licensed physician to any other person for a fee.

"Such procedure, under Kentucky law, also invariably constitutes the practice of medicine without a license. Any person, partnership, association or corporation (other than a Christian Scientist, chiroprapist, dentist, optometrist, chiropractor, nurse, pharmacist, midwife, or merchant of patent medicine, etc.) who opens, maintains or occupies an office or other place of business, or otherwise in any manner announces or expresses a readiness, directly, or indirectly through the services of licensed employees or agents, to diagnose and treat or correct any or all human conditions, ailments, diseases, injuries or infirmities by any means, methods, devices, or instrumentalities whatever, without first obtaining a license from the State Board of Health, is guilty of violation of the Kentucky Medical Licensure Act," and

"WHEREAS, the Committee has considered the definition of corporate practice of medicine, and has been advised by the legal counsel of the State Medical Association of cases which have existed in court, and in which judgments have been rendered, condemning the same type of practice to which our Committee objects,

"NOW, THEREFORE, BE IT RESOLVED:

That the House of Delegates of the Kentucky State Medical Association reaffirm the adoption of Suggested Guides of the Council of the Kentucky State Medical Association, and strongly implore the official adoption of these Guides by the Kentucky State Medical Association, and

"BE IT FURTHER RESOLVED:

That the corporate practice of medicine, whether by labor-management, hospitals, or otherwise, be

condemned, and the House of Delegates designate the proper committee through its Council to publicize and give the Council instructions to proceed or to designate to any committee the power to act through its Committee and attorney to bring proper action against those who are known to be practicing the corporate practice of medicine in Kentucky."

On the advice of Doctor Archer and other members of the Kentucky State Medical Association who appeared before your Reference Committee, Report No. 11, page 4, third paragraph, was revised by your Reference Committee to read as follows:

"BE IT FURTHER RESOLVED:

"That the corporate practice of medicine, whether by labor-management, hospitals, or otherwise, be condemned, and the House of Delegates designate the proper committee through its Council to publicize and *empower* the Council to proceed or to designate to any committee the power to act through its Committee and attorney to bring proper action against those who are known to be practicing the corporate practice of medicine in Kentucky."

Mr. Speaker, I move the adoption of the Report of the Committee on the Corporate Practice of Medicine, as revised by your Reference Committee No. 4, and our Committee wants to emphasize that we feel urgent action as soon as possible is indicated. This was emphasized by many members of the Kentucky State Medical Association who appeared before our Committee.

The motion was seconded and carried that the Report of the Committee on the Corporate Practice of Medicine be adopted as a whole.

**Report of the Advisory Committee
to Selective Service**

A brief report was submitted by the Advisory Committee to Selective Service due to the fact that they are more or less on a standby basis since the change in the law July, 1957.

Your Reference Committee approves the Report of the Advisory Committee to Selective Service.

Mr. Speaker, I move the adoption of this report.

The motion was seconded and carried that the Report of the Advisory Committee to Selective Service be adopted.

**Resolution B—Amendment to
Article VIII of the Constitution**

"WHEREAS, the House of Delegates may amend any article of the Constitution by a two-thirds vote of the Delegates registered at the Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been sent officially to each component county society at least two months before the Session at which final action is to be taken, and

"WHEREAS, it is first necessary to amend Article VIII of the Constitution before a Bylaw amendment can be submitted relative to the reapportionment of Councilors from the fifteen Councilor Districts, and

"WHEREAS, in the interest of a stronger, more interested and representative state association Council, a Bylaws amendment will be submitted to the

House of Delegates, for their consideration, at the Annual Session in 1958, calling for the election of Councilors on the basis of doctor population in each District, therefore

"BE IT RESOLVED, that Article VIII, Section 1 of the Constitution be amended to read as follows:

"The officers of this association shall be a President, a President Elect, three Vice Presidents, a Secretary, a Treasurer, a Speaker and Vice Speaker of the House of Delegates, and at least one Councilor from each Councilor District that may be established and such other officers as provided for in the Bylaws."

Note: This amendment will add the words "and at least one Councilor" in place of "and a Councilor" in the fourth line of Section 1, Article VIII of the Constitution."

Resolution B as introduced by the Jefferson County Medical Society in connection with the amendment to Article VIII of the Constitution came under much discussion, pro and con. There was considerable feeling that the amendment would make the Council top-heavy with representation from the Jefferson County Medical Society. It was likewise pointed out that since Jefferson County constitutes one-third of the membership of the Kentucky State Medical Association, that it might be more democratic for them to have more Council representation. The final vote of your Reference Committee was four (4) members in favor of the resolution, and one (1) member not in favor.

Mr. Speaker, I move the adoption of Resolution B.

The motion was seconded and carried by majority vote that Resolution B be adopted.

**Resolution C—Amendment to
Article V of the Constitution**

"WHEREAS, the House of Delegates may amend any article of the Constitution by a two-thirds vote of the Delegates registered at the Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been sent officially to each component county society at least two months before the Session at which final action is to be taken, and

"WHEREAS, all other elected officers of the Kentucky State Medical Association except Alternate Delegates are entitled to a vote in the House of Delegates, and

"WHEREAS, the Alternate Delegate should be in attendance at every meeting of the KSMA House of Delegates and keep himself informed on the actions and desires of the profession in Kentucky so that he will be prepared to represent them if called upon, therefore,

"BE IT RESOLVED, that Article V, Section 2 be amended to read as follows:

"Delegates shall be members of and elected by component societies in accordance with the Bylaws. Officers of the Association, Delegates and Alternate Delegates to the American Medical Association and the five immediate Past Presidents shall be ex-officio members of the House of Delegates and entitled to vote."

Note: This amendment will add the words "and Alternate Delegates" after the word Delegates in the third line of Section 2, Article V of the Constitution. Also it will delete the word "and" after the word association in the same section.

Resolution C introduced by the Jefferson County Medical Society in connection with an amendment to Article V of the Constitution

was approved by your Reference Committee.

Mr. Speaker, I move the adoption of Resolution C.

The motion was seconded and carried that Resolution C be adopted.

Report of the Council (Pages 5 & 6)

A recommendation to the Council by the Committee on Medical Education and Economics concerning the resolution on Mandatory AMA dues for KSMA members was not approved by this committee.

Your Reference Committee was in agreement with the recommendations of the Committee on Medical Education and Economics.

Mr. Speaker, I move the adoption of this section of the Report of the Council.

The motion was seconded and carried that this section of the Report of the Council be adopted.

Mr. Speaker, I move the adoption of this report as a whole.

The motion was seconded and carried that the Report of Reference Committee No. 4 be adopted as a whole. The Chairman thanked the members for their assistance.

Members signing the report of Reference Committee No. 4 were: Carl W. Kumpe, M.D., Covington, Chairman; J. L. Becknell, M.D., Manchester, Vice Chairman; Robert S. Dyer, M.D., Louisville; Walter Johnson, M.D., Paducah; M. D. Klein, M.D., Shelbyville.

REFERENCE COMMITTEE NO. 5

Roy H. Moore, Jr., M.D., Chairman

Reports of Miscellaneous Business

Report of the Medico-Legal Administrator

The report of the Medico-Legal Administrator outlined briefly his activity during the past year, together with his attendance at a Medico-Legal Symposium sponsored by the AMA in Atlanta Georgia in March. He went on to state that a committee from the Jefferson County Medical Society and the Louisville Bar Association had drawn up a standard of practice governing lawyers and doctors.

The Report of the Medico-Legal Administrator was approved by the Reference Committee No. 5. It was felt that Doctor Gordinier should be commended for his concise and efficient report.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Medico-Legal Administrator be adopted.

Report of the Committee to Study Relations with Voluntary Health Groups

The Report of the Committee to Study Relations with Voluntary Health Groups was brief and stated that letters from its members stated there were no special reports to be made at this time. However, they anticipated some problems and work for the coming year.

The Report of the Committee was approved as submitted.

It was the feeling of the Reference Committee that the Committee to Study Relations with

Voluntary Health Groups should be kept intact for at least another year.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Committee to Study Relations with Voluntary Health Groups be adopted.

Report of the McDowell Home Committee

This report states that the McDowell Home has been getting along very well the past year. There have been approximately 1000 adults and 250 children to visit the home within the year. Some furniture has been added making its total worth \$23,600. The total assets of the McDowell Home are \$50,905.66. The committee thanked the pharmacists who donated \$10,000, and the Eli Lilly Company for their donation of \$20,000 to rehabilitate the Apothecary Shop. Thanks were also expressed to the Ladies' Auxiliary, the Kentucky State Medical Association and the Kentucky Surgical Society for their good work and donations toward the McDowell Home.

This report was approved as submitted and it was felt that Doctor Vance and his Committee should be highly commended for the fine work and active interest taken in the McDowell Home.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the McDowell Home Committee be adopted.

Report of Representative to Conference of Presidents and Other Officers of State Medical Association

This report deals with the attendance of the Representative at the thirteenth annual meeting of the Conference of Presidents and Other Officers of State Medical Association held in New York at the Waldorf Astoria on June 2, 1957, at which meeting he presided.

The Report of Doctor Graves, Representative to Conference of Presidents and Other Officers of State Medical Association, was approved as submitted.

The Committee felt that Doctor Graves should be commended for his fine work and interest in this matter.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the report as submitted be adopted.

Report of the Board of Directors of Kentucky Physicians Mutual, Inc.

This report set forth the continuing growth and stability of the Kentucky Physicians Mutual, Inc., plan, stating that during the company's first year less than \$60,000 was paid to physicians for services while in the period from July 1, 1956 to June 30, 1957 a total of \$3,826,000 was paid for professional services. As of June 30, 1957 there were 488,307 participants among the policy holders. In order to clarify any misunderstanding about Medicare, it pointed out that the Kentucky Physicians Mutual, Inc., simply acts as a clearing house or fiscal agent for the payment of claims. It expressed its appreciation to the Kentucky State Medical Association for their support and cooperation, and to the Blue Cross Plan. The total assets of the Kentucky Physicians Mutual, Inc., as of June 30, 1957, were \$2,598,216.51.

The Report of Kentucky Physicians Mutual was approved as submitted, after a careful review.

The Reference Committee offers the following recommendation:

In order to have better understanding and more adequate representation, consideration should be given to more equitable geographical representation and to more diversified representation as to specialty groups and general practitioners elected to the Board of Directors, and further, that 30% of the new members elected each year be physicians who have not previously served as a member of the Board of Directors.

It is further felt that Doctor Hancock, as President of the Kentucky Physicians Mutual, Inc., be commended for his work and interest in this important service to the medical profession and citizens of Kentucky.

Mr. Speaker, I move the adoption of this section of the report.

In the discussion that followed it was pointed out that the efficiency with which the Board of Directors of the Kentucky Physicians Mutual operates would be impaired greatly with the addition each year of a number of new members.

The following amendment to the above recommendation of the Reference Committee was offered: That it is the request of the House of Delegates of the KSMA that one (1) new member be elected each year to the Board of Directors of the Kentucky Physicians Mutual, Inc., who has not previously served on this Board.

Mr. Speaker, I move the adoption of this amendment.

The motion was seconded and carried that the amendment to the recommendation of the Reference Committee be adopted.

The original motion as amended was seconded, carried and adopted.

Resolution A—Expenses to the American Medical Association Meetings for Delegates or their Alternates

"WHEREAS, through the most gracious and devoted service of all Delegates and Alternate Delegates to the AMA from Kentucky, at present and in the past, the Association has not been burdened with the cost of their trip to the American Medical Association's Annual and Interim Meetings, and

"WHEREAS, this expense has been above and beyond that which should be expected of a physician who has given of his time and talent to serve medicine, from Kentucky, and

"WHEREAS, they should be relieved of this sometimes large expense and it should be assumed by the Association as an important and worthwhile part of its cost, and

"WHEREAS, a post-card poll was conducted by this County Society, in order that the practice of other state associations might be used as a guide in this matter, which revealed that every state responding now pays the expenses for their Delegates and/or Alternate Delegates to the meetings of the American Medical Association, therefore,

"BE IT RESOLVED, that this House of Delegates authorize the Council to reimburse the Delegates to the AMA, or their Alternates if attending to represent the State as a Delegate, for their expenses rela-

tive to attending the Annual and Interim sessions of the American Medical Association. The amount and method of this reimbursement to be determined by the Council after a review of the practice followed in other states of a similar size to Kentucky."

This Resolution was studied carefully and is approved as submitted.

Mr. Speaker, I move the adoption of this section of the Report.

The motion was seconded and carried that the Resolution A be adopted.

Mr. Speaker, I move the adoption of this report as a whole.

The motion was seconded and carried that the Report of Reference Committee No. 5 be adopted as a whole. The Chairman thanked the members for their assistance.

Members of Reference Committee No. 5 signing this report were: Roy H. Moore, Jr., M.D., Louisville, Chairman; Glenn W. Bryant, M.D., Louisville, Vice Chairman; Alec Spencer, M.D., West Liberty; Joe Miller, M.D., Benton; Russell Hall, M.D., Wheelwright.

REFERENCE COMMITTEE NO. 6

Blaine Lewis, Jr., M.D., Chairman

Reports on Miscellaneous Business

Report of the Advisory Committee to the Editor

This report states that on the whole, The Journal has enjoyed a prosperous year both financially and journalistically and numerous favorable comments have been received. An appeal was made to all the doctors in Kentucky to submit articles for publication in The Journal, which is a good practical instrument for the dissemination of scientific knowledge among its readers.

The Committee heartily endorses this report and recommends that more of our physicians take an active part in contributions to the Kentucky State Medical Journal.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Advisory Committee to the Editor be adopted.

Report of the Committee on Emergency Medical Service and

Report of the Committee on Public Information and Service

(Paragraph 3)

This report deals with a meeting of the Committee on Emergency Medical Service at which accounts of medical personnel in eastern Kentucky during the floods were given. It was urged that preventive work should take place before disaster of this type occurs. In addition the committee urged that every county society within the state set up an emergency medical committee; that a survey of hospitals be made to determine the extent of expansion in time of emergency, and that a concerted effort be made to advise people of their blood types and Rh factors so that a standardized card could be carried on the person of the individual.

The Committee on Public Information and Service recommended that all people be encouraged to know their blood type and Rh factor, and that the medical profession increase their efforts of educating the public to the value of immunizations.

The context of these reports is very similar. This Committee recommends that these subjects concerning immunization records and blood type records be referred back to the Committee on Emergency Medical Service with the suggestion that the Committee contact the State Health Commissioner and General Jesse Lindsey, Adjutant General of Kentucky, and offer its cooperation in developing a statewide program.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Committee on Emergency Medical Service and paragraph 3 of the Report of the Committee on Public Information and Service be adopted.

Report of Advisory Committee to Woman's Auxiliary

This report states that the Women's Auxiliary has carried on successfully by themselves, having called on the committee only once during the entire year.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Advisory Committee to the Woman's Auxiliary be adopted.

Report of the Committee on Medical Services

This report deals with a resolution by the Board of Directors of the Kentucky Division of the American Cancer Society that hospitalization be discontinued in 1960 for the treatment of indigent cancer patients in Kentucky. The KSMA Advisory Committee on Cancer endorses the position that provisions should be made by the State to take care of this class of patient. It was recommended to the President that the Associate Committee on Infant and Maternal Mortality be reappointed as two separate committees, one to study infant mortality and one to study maternal mortality, with at least ten obstetricians and ten pediatricians appointed to these committees. The Committee recommends: (1) that the name of the Associate Committee on Physical Therapy be changed to the Associate Committee on Physical Medicine and Rehabilitation; (2) that a list be compiled and made available to KSMA members of all adequately trained physiotherapists in the State; (3) that a physical therapy act be suggested to the State Legislature; (4) that a State licensure for physical therapists be established; and (5) that both the University of Kentucky and the University of Louisville be encouraged to establish an educational program for physical therapists.

Section (1) being a statement of fact, the Committee feels they have no recommendations in this matter.

Section (2) was unanimously approved by the Committee.

Section (3), paragraphs 1, 2 and 5 were unanimously approved.

Mr. Speaker, I move the adoption of this section of this report.

The motion was seconded and carried that the Report of the Committee on Medical Services be adopted.

Report of the Advisory Committee to the University of Louisville Student AMA Chapter

The report stated that there had been no request for services during the past year.

This report was read and it was felt that the advisor should make every effort to offer his services to the University of Louisville Student AMA Chapter during the year.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Advisory Committee to the University of Louisville Student AMA Chapter be adopted.

Report of the Woman's Auxiliary to the KSMA

The Woman's Auxiliary to the KSMA reported splendid progress during the year. Four Board meetings were held and the membership was increased by 1192, the largest in the history of the organization. One new auxiliary was added. The sale of an AMEF Christmas Card is one of the projects underway. The Auxiliary participated in the National Conference on Rural Health held in Louisville in March; in the State Cancer Essay Contest in cooperation with the American Cancer Society and the Extension Department of the University of Kentucky; in renovating the Doctor's Shop; in cooperation with the heart authorities during the Heart Drive.

It was felt that the Woman's Auxiliary should be commended for the fine job they have done and the progress they have made in the past year.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Woman's Auxiliary to the KSMA be adopted.

Resolution H—Separate Department of Mental Health with Commissioner Reporting to Governor

"WHEREAS, the Commissioner of Mental Health of the Commonwealth of Kentucky has requested an opinion from the Kentucky State Medical Association on the advisability of maintaining a separate Mental Health authority versus incorporating Mental Health facilities in another state agency, and

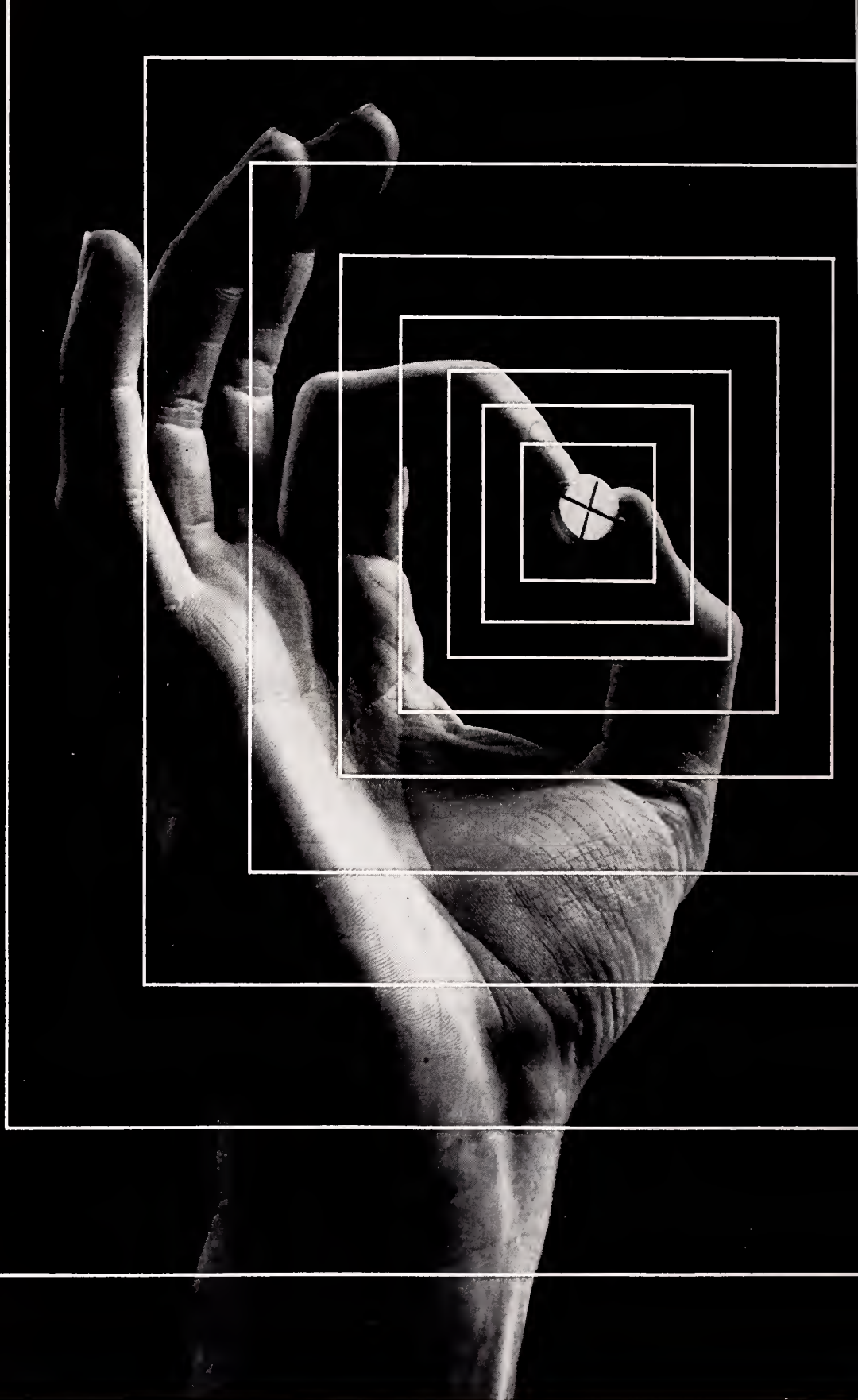
"WHEREAS, this request was referred to the committee on mental hygiene and institutions of the Kentucky State Medical Association for study, and

"WHEREAS, This committee in studying this problem was impressed with the significance of the fact that the best programs for the mentally ill occur in those states where the program is administered by a single agency reporting directly to the Governor. This is historically true, as in Massachusetts and New York which have long had outstanding programs for the mentally ill. In reviewing the history of our own Department of Mental Health I'm sure you know that frequent surveys over a period of many years have recommended just this sort of administrative set up that we have not. The national trend is in this direction. There are sound administrative and budgetary reasons for having a separate department. It is a fact that other outstanding Mental Health Programs have had such departments for a long time. This department in the state of Kentucky has made tremendous progress in recent years, and

"WHEREAS, the Council of the Kentucky Psychiatric Association has endorsed a separate Mental Health authority with direct access to the Governor, NOW, THEREFORE

"BE IT RESOLVED that the House of Delegates of the Kentucky State Medical Association endorse the concept of a separate department of Mental Health with its Commissioner reporting directly to the Governor."

This resolution recommends that the State Department of Mental Health be continued as a separate entity from the State Health Depart-



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NEW DOSAGE. The recommended adult dose is 1 Gm. (2 tablets or 4 teaspoonfuls of syrup) the first day, followed by 0.5 Gm. (1 tablet or 2 teaspoonfuls of syrup) every day thereafter, or 1 Gm. every other day for mild to moderate infections. In severe infections where prompt, high blood levels are indicated, the initial dose should be 2 Gm. followed by 0.5 Gm. every 24 hours. Dosage in children, according to weight; i.e., a 40 lb. child should receive $\frac{1}{4}$ of the adult dosage. It is recommended that these dosages not be exceeded.

TABLETS: Each tablet contains 0.5 Gm. ($7\frac{1}{2}$ grains) of sulfamethoxyypyridazine. Bottles of 24 and 100 tablets.

SYRUP: Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxyypyridazine. Bottle of 4 fl. oz.

1. Nichols, R. L. and Finland, M.: *J. Clin. Med.* 49:410, 1957.



ment. Therefore, be it resolved that the House of Delegates of KSMA endorse the concept of a separate Department of Mental Health, with its commissioner reporting directly to the Governor.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that Resolution H be adopted.

Resolution I—Care of Eyes of Newborn Babies

"WHEREAS, KRS 214.140 Duties of state and county boards of health as to eye diseases, The State Board of Health shall secure the cooperation and assistance of the national health authorities in dealing with the diseases mentioned in KRS 214.140 (trachoma, ophthalmia and other eye diseases), and shall prepare and issue bulletins and other literature containing information as to the prevalence and infectious character of such diseases, and the precautions to be used against infection, and shall furnish formulae and other information for the use of physicians and midwives in the management and treatment of these diseases. The county boards of health shall furnish physicians and midwives with the simple drugs to be used for the indigent in preventing and treating these diseases, and

"WHEREAS, It shall be the duty of physician or midwife in attendance upon childbirth to carefully cleanse the eyes of the child immediately after birth with a saturated solution of boric acid, wipe dry with a clean absorbent cotton, the lids to be carefully opened, and one or two drops of a one per cent solution of nitrate of silver dropped into the conjunctival sac. This application should not be neutralized with a salt solution nor should it be repeated unless so dictated by a physician. (Originally adopted upon recommendation by the Kentucky State Medical Association.) Filed August 28, 1942.

"NOW THEREFORE, BE IT RESOLVED, That the above mentioned (KRS 214.140 et seq.) be changed by adopting a new recommendation to take the place of the one adopted on August 28, 1942. The new recommendation to read as follows:

"It shall be the duty of physician or midwife in attendance upon childbirth to carefully cleanse the eyes of the child immediately after birth with a sterile solution of distilled water, and wipe dry with a clean absorbent cotton. Following this the lids to be carefully opened, and if the attending physician deems necessary, one or two drops of a one per cent solution of silver nitrate, or other suitable antibiotic or chemotherapeutic agent dropped into the conjunctival sac. The choice of this agent, or the need for the use of same, can rest with the individual physician. It should be repeated only if so dictated by a physician."

Resolution I concerns the care of the eyes of newborn babies. The Committee approves this report, with the change that midwives be restricted to a certain specific agent to be instilled in newborn babies eyes as recommended by the State Board of Health.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that Resolution I be adopted.

Mr. Speaker, I move the adoption of this report of Reference Committee No. 6 as a whole.

The motion was seconded and carried that the Report of Reference Committee No. 6 be adopted as a whole. The Chairman thanked the members for their assistance.

Members of Reference Committee No. 6 signing this report were: Blaine Lewis, Jr.,

M.D., Louisville, Chairman; W. G. Edds, M.D., Calhoun, Vice Chairman; H. G. Wells, M.D., Georgetown; Douglas Jenkins, M.D., Richmond; Davis Asher, M.D., Pineville.

REFERENCE COMMITTEE NO. 7

L. F. Beasley, M.D., Chairman
Reports on Miscellaneous Business

Report of Committee on Physicians Placement Service

This report states that the Physicians Placement Service has been in operation three years and the committee had one meeting during the year. It was decided to continue the operation already in effect, which coincides with the policies of the Association and the code of medical ethics.

The Committee has reviewed the report of the Committee on Physicians Placement Service, and notes that this committee has been active and has had a meeting at which it was decided to continue the program already in effect in placement of physicians.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Committee on Physicians Placement Service be adopted.

Report of the Committee on Rural Health

The Committee on Rural Health reported many activities during the year including participation in the 1957 National Conference on Rural Health; presented a program during Farm and Home Week at the University of Kentucky; presented a program to the Kentucky Agricultural Council; and had three meetings of its committee. The Chairman and KSMA Field Secretary attended a study conference on Rural Health problems at Purdue University in October of 1956.

The Committee has reviewed the report of the Committee on Rural Health. This Committee has had a very active year and has had several meetings in addition to their work in connection with the National Conference on rural health. In addition they presented a program of keeping the family healthy at the Farm and Home Week at the University of Kentucky. The chairman of this committee attended a study conference on rural health problems at Purdue University. In this report the committee brings up a number of questions that must be answered by the medical profession, and the reference committee feels that the Committee on Rural Health has gone a long way toward answering many of these questions positively. We wish to commend the Committee on Rural Health on their activities this year.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Committee on Rural Health be adopted.

Report of KSMA Representatives on Joint Commission for Improvement of Patient Care

The Committee has studied the report of the KSMA Representatives on the Joint Commission for Improvement of Patient Care. This committee has also been active and had had

two important meetings at which progress was made toward the eventual solution of the problem of better patient care, and steps were taken to implement Kentucky's defense in case of disaster.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Representatives on the Joint Commission for Improvement of Patient Care be adopted.

Report of the Rural Kentucky Medical Scholarship Fund

This Fund reports another successful year, bringing the number of loans that have been made and are in the process of being made to 332 for a total sum of \$253,396.00. As of August 1, 1957, contributions to the Fund totaled \$200,050.00 and \$50,000 was assigned the Fund in the Governor's budget for July, 1956 to June 30, 1958.

The committee has studied the report of the Rural Kentucky Medical Scholarship Fund. This committee has been active and has approved loans to 39 medical students for the year 1957-58. It was noted in studying the report that 46 physicians who had been assisted by the Fund had entered rural practice in our state and 26 more are now in military service or are taking internships or residencies.

Mr. Chairman, I move the adoption of this section of the report.

The motion was seconded and carried that the Report of the Rural Kentucky Medical Scholarship Fund be adopted.

Resolution F—Establishment of a Premature Infant Center in Louisville

"WHEREAS, neonatal morbidity and mortality remain among Kentucky's important health problems, and prematurity is the largest single cause of these problems; and

"WHEREAS, neonatal morbidity and mortality could be greatly reduced if adequate educational facilities were available for the training of nurses in the care of premature infants, and

"WHEREAS, Kentucky has not as yet provided such educational facilities as have other States, and

"WHEREAS, the treatment of premature children and their mothers by well trained nurses is highly important to their release in the best possible condition,

"NOW, THEREFORE, BE IT RESOLVED, that the Kentucky State Medical Association in Convention assembled in Louisville, Kentucky, this eighteenth day of September, 1957, urges Governor A. B. Chandler and Commissioner of Health, Russell E. Teague, M.D., that Kentucky establish a Premature Center in Louisville to provide specialized nurses' training and premature infant facilities."

The Committee has studied the Resolution of the Jefferson County Society relating to the establishment of a premature center in Louisville. The reference committee feels that there is a need for such a facility in the state.

Mr. Speaker, I move the adoption of this resolution.

The motion was seconded and carried that Resolution F be adopted.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 7 as a whole.

The motion was seconded and carried that

the Report of Reference Committee No. 7 be adopted as a whole. The Chairman thanked the members for their assistance.

Members of Reference Committee No. 7 signing this report were: L. F. Beasley, M.D., Franklin, Chairman; Carl Cooper, M.D., Bedford, Vice Chairman; N. L. Bosworth, M.D., Lexington; Paul Sides, M.D., Lancaster; Claude C. Waldrop, M.D., Williamstown.

Unfinished Business

The Speaker announced that the Resolution on Regulation of Fees as submitted by the Fayette County Medical Society in 1956 was referred to a Reference Committee, was amended by that Reference Committee, and returned to the House of Delegates. Since the resolution required a change in the Article of the Constitution of KSMA, it was necessary for it to lay over one year. The resolution is as follows:

"WHEREAS, there is a movement by the health insurance industry, the Blue Shield organization, some officials of the AMA, the Federal government and some members of the KSMA to establish a nation-wide fixed fee schedule for medical-surgical services,

"WHEREAS, the Kentucky Blue Shield at the time of its incorporation by the KSMA and quite recently has promoted the adoption of a service plan to replace the present indemnity plan,

"WHEREAS, these two approaches toward socialized medicine are of such an important nature that mature consideration should be given them and action on them should not be taken by a simple majority vote of the House of Delegates, but should be subject to the same rules which govern adoption of amendments to the constitution; viz. a two-thirds majority vote of the House of Delegates with a year elapsed between proposal and vote for consideration by all members of the KSMA, therefore be it.

"RESOLVED that Article II of the Constitution be amended by inserting after the last sentence the following:

"The Association shall take no action in pursuance of these or any objectives which will directly or indirectly regulate or attempt to regulate physicians fees.

"This Reference Committee after much discussion felt this resolution lacks flexibility and would embarrass the KSMA in future discussion and action connected with physicians fees. The Committee recommends that the proposed constitution amendment be amended to read: Resolved that Article II of the Constitution be amended by inserting after the last sentence the following:

"The Association shall take no action in pursuance of these or any objectives which will directly or indirectly regulate or attempt to regulate physicians' fees except by a 2/3 majority vote of the House of Delegates.

"Mr. Speaker, I move the adoption of this section of the report as amended.

"The motion was seconded and carried that the resolution (#E) on the regulation of fees, submitted by the Fayette County Medical Society, be accepted as amended.

"The Speaker pointed out that the above resolution would now have to lay over for one year."

After discussion in connection with defeating the amendment, a protest was lodged by the President of the Kentucky Physicians Mutual, Inc., J. Duffy Hancock, M.D., in which he stated that Blue Shield was not now and had never attempted to put over a service plan, and that the inclusion of the second "Whereas" in Resolution E, as submitted by the Fayette County Medical Society, was a mis-statement and inaccurate. He requested that the people who presented the resolution withdraw the second "Whereas" pertaining to Blue Shield.

A motion was made, seconded and carried that that part of the Resolution submitted by the Fayette County Society and pertaining to the relationship of Blue Shield be stricken from the record, since the intent of the Resolution is still there with or without it. It was not put in with the idea of either commendation or condemnation.

In the discussion that followed, which was a lengthy and thorough one, several points were brought out as follows: Veterans contract for hometown care; the practice of medicine as a free enterprise; original resolution versus amendment; impairment of action of the House; reasonableness of a year's lay over in signing contracts; and how it would change the Constitution.

The Speaker then called for a vote on the amendment to the Fayette County Resolution on the Regulation of Fees. Yes—32. No—78. The amendment was defeated.

The Speaker then called for a vote on the original Resolution of the Fayette County Medical Society on the Regulation of Fees. Yes—13. No—an overwhelming majority. The Resolution was defeated.

Report of Awards Committee

The Speaker asked that the Awards Committee nominees be presented again, and that other nominations, if any, be made from the floor.

The nominees as presented by the Awards Committee were:

Oscar O. Miller, M.D., for the Distinguished Service Award.

Owen Pigman, M.D., Whitesburg, for the General Practitioner Award.

A motion was made, seconded and carried that the nominations be closed and that the Secretary cast a single ballot electing Doctors Miller and Pigman.

Election of Officers

At this time a motion was made, seconded and carried that the nominations to fill the vacant offices for the coming year be closed, and the following were elected by the casting

of a single ballot by the Secretary:

President Elect Robert W. Robertson,
M.D., Paducah

Vice Presidents:

Central John S. Harter, M.D.,
Louisville

Eastern Richard G. Elliott, M.D.,
Lexington

Western Walter R. Byrne, M.D.,
Russellville

Delegate to AMA W. Vinson Pierce, M.D.,
Covington

Alternate Delegate to AMA Foster D. Coleman, M.D.,
Louisville

Election of Councilors

The delegates from the counties in the districts which were to elect councilors and who had held individual meetings after the first session of the House, presented their nominations and the following were elected by the vote of the full House of Delegates.

Fifth District Carlisle Morse, M.D.,
Louisville

Sixth District John P. Glenn, M.D.,
Russellville

Eight District Norman Adair, M.D.,
Covington

Eleventh District Joe M. Bush, M.D.,
Mt. Sterling

Fifteenth District Keith P. Smith, M.D.,
Corbin

Election of 1958 Nominating Committee

The Nominating Committee to serve at the 1958 Annual Meeting was elected as follows:

James W. Archer, M.D., Paintsville

Joe M. Bush, M.D., Mt. Sterling

Howell Davis, M.D., Owensboro

W. V. Lyon, M.D., Ashland

Carroll Witten, M.D., Louisville

Nominations for Board of Directors Kentucky Physicians Mutual, Inc.

The following list of nominees was submitted for vacancies on the Board of Directors of the Kentucky Physicians Mutual, Inc.:

Richard J. Rust, M.D., Newport

J. Duffy Hancock, M.D., Louisville

Coleman C. Johnston, M.D., Lexington

John Dickinson, M.D., Glasgow

Joseph C. Bell, M.D., Louisville

Thoms O. Meredith, M.D., Harrodsburg

Clark Bailey, M.D., Harlan

Garnett J. Sweeney, M.D., Liberty

Ralph D. Lynn, M.D., Elkton

Joseph H. Humpert, M.D., Covington

Ward Bushart, M.D., Fulton

A motion was made, seconded and carried unanimously that the list as it stands be submitted to the Kentucky Physicians Mutual, Inc., without change or additions.

There being no further business, a motion was made, seconded and carried that the meeting adjourn at 10:00 P.M.

SPECIAL ARTICLES

KSMA PROGRAM COMMENDED Kentucky's Pioneer Plan*

Four-way cooperation on a "doctor for your community" program in Kentucky might well be examined by other states whose own rural areas suffer from poor distribution of physicians. In the Organization Section of this issue (page 355) is a brief report describing how the Physicians Placement Service of the Kentucky State Medical Association, the Board of the Rural Kentucky Medical Scholarship Fund, the University of Louisville School of Medicine, and the state general assembly are working together to bring adequate medical care to communities which previously had failed to find physicians.

It is a cooperative program in the truest sense—bringing out the best efforts of medical educators, practicing physicians, medical association officials, business men, lay organizations, civic leaders, state legislators, and other Kentuckians. The program offers qualified medical students at the University of Louis-

ville School of Medicine two financial inducements to practice in certain areas which are in critical need of doctors: full-tuition loans at the rate of \$900 a year, and/or full refunds of past tuition payments.

The loan fund is financed by contributions from physicians, lay groups, and individuals, and grants of the general assembly. The state legislators also have voted to spend up to \$500,000 a year in tuition refunds for University of Louisville School of Medicine alumni, who practice in designated communities.

The two-pronged plan as it succeeds in Kentucky is not necessarily a panacea for other states which face isolated community doctor shortages. But it does illustrate that cooperative action at the state level might be the catalyst which accelerates solution to a physician maldistribution problem which knows no specific boundaries. It is an experience worth study, an experiment worth praise.

"Doctor For Community" Program**

The first physician to be refunded medical school tuition under a new "doctor for your community" program is J. W. Walker of Mount Vernon, Ky. Early last month he received a check for \$900—half the tuition paid toward his graduation from the University of Louisville School of Medicine in 1945—because he chose to practice in Rockcastle County, which had been in critical need of medical care. If Dr. Walker remains in Mt. Vernon, and that was his intent, he will receive another \$540 next year, and the balance of his tuition, \$360, the following year.

Any University of Louisville Medical School graduate is eligible to participate in this program set up by the school and the Kentucky general assembly, which has voted to grant up to \$500,000 a year in state aid to bring more adequate medical care to designated rural areas. This month Dr. Robert E. Cornett of Jackson, Ky., was scheduled to receive \$1,600, the first refund installment of his four-year tuition, for practicing in Breathitt County. (Tuition had increased in the 10 years since Dr. Walker graduated.)

Refund of tuition is one of two pioneer programs being pursued by organized medicine to relieve a shortage of physicians in certain "critical" areas of Kentucky. The state medical association is also co-

sponsoring (with the University of Louisville School of Medicine and the Board of the Rural Kentucky Medical Scholarship Fund, headed by Dr. C. C. Howard) a loan plan for qualified medical students at the school. Under this project, benefiting 17 new students for the new academic year, annual loans of \$900 are made. They are to be repaid at 2% interest after graduation, but if the borrower then practices in one of 10 rural Kentucky counties in dire need of medical care, the yearly loans are successively forgiven for each year of practice.

"Counting interest on the total loan, plus the \$3,200 tuition refund," said Dr. Howard, "a medical student now can get a total of about \$7,000 if he practices in a critical area of the state."

During the past decade the scholarship fund has benefited more than 100 students through over \$200,000 in finances contributed by physicians, other individuals, and organizations in Kentucky; last year the state general assembly appropriated its first annual \$25,000 for the fund. Applicants need not be native Kentuckians—recipients this fall at the University of Louisville School of Medicine include one youth from Indiana and a young woman from California (who heard about the loan plan from the American Medical Association).

The state medical association's Physicians Placement Service committee, headed by Dr. Delmas M. Clardy of Hopkinsville, makes available to inquiring doctors a descriptive list of Kentucky communities which need help in securing medical service. (See editorial on page 352 of this issue.)

*This article originally appeared as an editorial in the September 28, 1957, issue of the *Journal of the American Medical Association*, on page 352.

**An item in the organization section of the September 28, 1957, issue of the *Journal of the American Medical Association* on page 355.



Clark Bailey

W. Clark Bailey

1900-1957

William Clark Bailey, M.D., president of the Kentucky State Medical Association in 1951-2, died in his sleep at his home in Harlan on November 20 at the age of 57.

Doctor Bailey, who was elected a KSMA delegate to the American Medical Association in 1944, had served in that capacity (with the exception of his two years as KSMA president-elect and president) until his death. He had been on various KSMA committees and in 1945 he was elected vice president of the AMA. He was a member of that association's Legislative Committee and Committee on Medical Care of Workers in the Bituminous Coal Mining Area.

The son of Granville Pearl Bailey, M.D., one of the first physicians to practice in Harlan County, he graduated from the University of Louisville School of Medicine in 1926, the same year he married Agnes Asher of Pineville. Doctor Bailey returned to Harlan to take over his father's practice after completing his internship at the Tuberculosis Sanatorium in Louisville and Children's Free and Louisville City Hospitals.

A past president of his county society, he also belonged to the Southern Medical Association and was a founder-member of the World Medical Association. He had always taken an active interest in the civic and educational life of his city and state and was past president of the Harlan Kiwanis Club, had served on the City Board of Education, and was a member of the Board of Trustees of Georgetown College.

The passing of Doctor Bailey, who gave his time and energy so unselfishly in the interests of his fellow man, will leave a void in the medical profession, his community, and the state. His integrity, experience, energy, astuteness, and personal warmth will be particularly missed by the Kentucky State Medical Association, which he had served so faithfully and well throughout the years.



EDITORIALS



KSMA'S ADVENTURE IN COOPERATION PAYS OFF

KSMA's Rural Kentucky Medical Scholarship Fund, which has been heralded in both the lay and medical press, has recently added a new plus to its plan to provide adequate medical care for rural Kentuckians.

The newest feature of this pioneering plan is aimed at filling the need for medical specialists in various rural areas by providing specialty training for a very small number of scholarship recipients who have completed their internship.

This new provision, together with previous phases of the Fund plan (providing loans to medical students who agree to practice in rural areas and full tuition loans or refunds of past tuition payments to graduates of the University of Louisville who agree to practice in critical areas), make Kentucky's Rural Medical Scholarship unique throughout the nation.

The Fund came into being soon after World War II, when, with many doctors in military service and a number of younger physicians showing a tendency to specialize in rural areas, the problem of replacing the "old-time country doctor" became acute.

Leaders in the KSMA, led by C. C. Howard, M.D., Glasgow, went to work to solve the problem. By securing the cooperation of leaders in agriculture and industry, and the University of Louisville School of Medicine, they were able to collect approximately \$140,000 in two years. This launched the Rural Kentucky Medical Scholarship Fund, benefiting medical students who agreed to practice in rural Kentucky areas.

Since its start 12 years ago, the Fund has or is benefiting 120 students and physicians. Despite the rising cost of medical education, the Doctor Draft Act, and the Korean War (which

reduced the Fund's potential), 25 Doctors who were helped by the Fund are now in practice. Others have completely fulfilled their obligations to the Fund.

The regular program was expanded when the 1956 legislature, under the leadership of Governor Chandler, appropriated \$50,000 for 1956-58. Ten counties which were considered most critically in need of medical care were designated, and it was stipulated that recipients who agreed to practice in these counties would receive the cancellation of a year's loan for each year of practice in one of these counties.

A state appropriation by the same legislature to the University of Louisville paved the way for tuition refunds to graduates of the University who practiced in one of these 10 counties for a three-year period. Any student taking advantage of these two plans, could receive benefits amounting to as much as \$7,000.

The many interviews, the great volume of correspondence involved in administering the program, and considerable bookkeeping are handled by the KSMA Headquarters Staff, while the conduct of the financial administration of the Fund is capably handled by the Fiscal Agent, Mr. George Caldwell, Vice President of the Louisville Trust Company.

Kentucky physicians have good reason to be proud of the progress that organized medicine, in cooperation with leading educators, legislators and businessmen, has made in this important area. Dedicated effort, foresight, initiative, perseverance, and cooperation have made Kentucky's plan for distribution of physicians to needy rural areas one that may well become a model for other states to follow. Today, the plan is proving itself—we have come a long way!

Gaithel L. Simpson, M.D.

Opinions expressed in contributions to The Journal are those of the writers and do not necessarily reflect the views of the Kentucky State Medical Association.

BLUE SHIELD—FOR ALL DOCTORS

HAVE you heard it said that Blue Shield is a plan to benefit the specialist or surgeon only? Let's look at the facts.

Last year your Blue Shield Plan paid over \$1,700,000 to doctors for home and office surgery, medical cases in the hospital, obstetrics, anesthesia, and x-ray. This means that about fifty per cent of all Blue Shield money is paid out for other than surgical procedures in the hospital.

In 1956, total Kentucky Blue Shield payments to doctors were almost \$3,500,000. This year that amount will be considerably larger with a commensurate increase in the amount paid for services other than major surgery.

The number of services which were rendered under Blue Shield in 1956 totaled 116,088. Membership at the end of 1956 was 464,278 persons. Surgical in-hospital services represented only 34,826 of these services rendered.

The growth of Blue Shield has been rapid and is continuing. However, in the interest of the people of the community and of the doctors who serve them, every effort must be made to

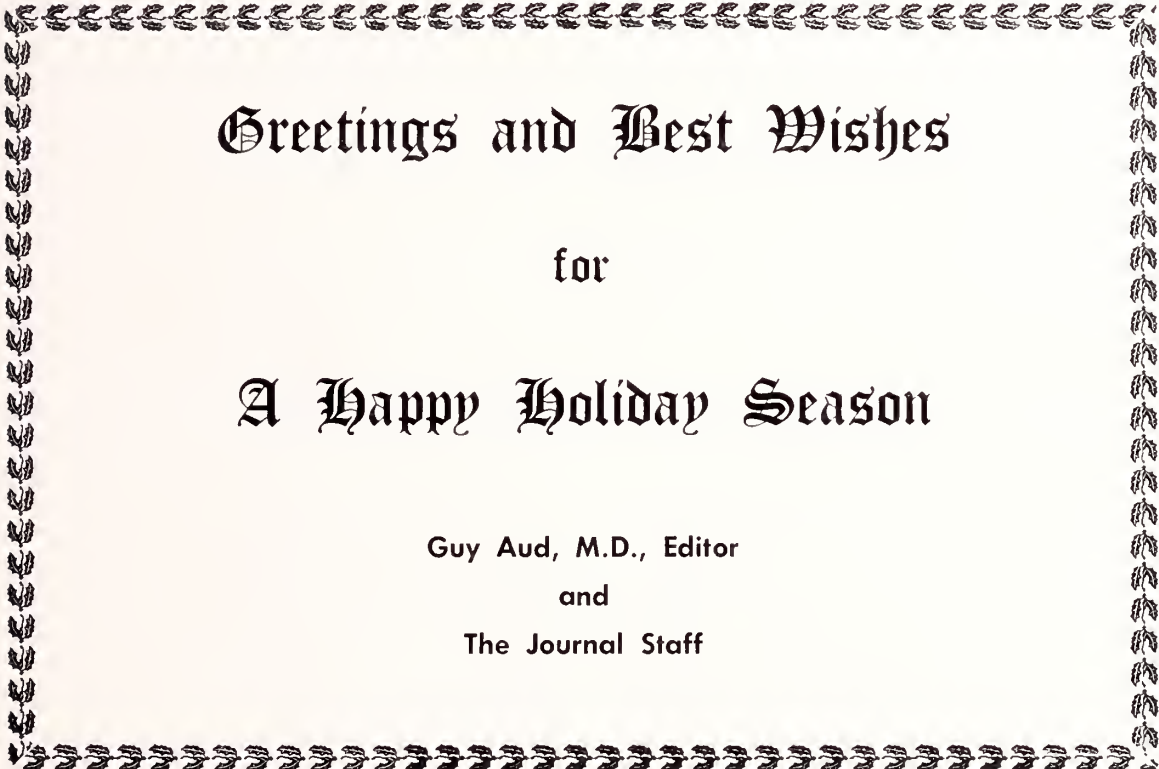
increase membership. Actually only a small percentage of the people in Kentucky have Blue Shield. While many others have commercial insurance plans, too many of our people do not have prepaid protection and are dependent on their current income or moderate savings to take care of unexpected illness or accident. This is not sufficient. Seventy-two per cent of the American people either have no savings or less than \$500. And most of the American income is committed to making payments upon existing obligations.

Those people who are prepaying for protection, so as to be in a position to better meet their responsibility to doctors, are entitled to assurance from the medical profession that charges are *not* increased by any doctor when he learns that the patient is carrying protection.

The growth and improvement of prepayment plans, and objectives of the medical profession will be furthered, as more doctors accept as full payment the amount paid by the plan.

Blue Shield is a plan for all the people—and for all the doctors.

J. Duffy Hancock, M. D.



Greetings and Best Wishes for A Happy Holiday Season

Guy Aud, M.D., Editor
and
The Journal Staff



ORGANIZATION SECTION



Action on Forand Bill Urged by Dr. Leonard

"Now is the time to take action against the Forand Bill (HR 9467), which has been termed 'the next to the last step in socializing American medicine,'" said Thomas P. Leonard, M.D., Frankfort, chairman of the KSMA Committee on Legislation, who urged all KSMA members to personally express their views to their congressmen.

Called "the most dangerous piece of medical legislation since 1949" by an AMA official, it was introduced on August 28, 1957 by Representative Aime J. Forand (D—R. I.), fourth-ranking member of the House Ways and Means Committee which will study the bill.

The AMA has adopted a position of active opposition to the bill and has formed a committee to conduct a "public education campaign" against it and to study how private health insurance for the elderly can be extended. The committee, headed by G. M. Fister, M.D., Ogden, Utah, includes: J. Duffy Hancock, M.D., Louisville; Francis C. Coleman, M.D., Des Moines, Iowa; Robert Novy, M.D., Detroit, Michigan; and George F. Gsell, M.D., Wichita, Kansas.

Provisions of the bill include: (1) hospital care up to 60 days a year, plus an additional 60 days in a nursing home, if sent after hospitalization, to retired Social Security beneficiaries, their survivors and dependents. (2) necessary surgery (and emergency surgery in physician's office) for an additional 12 million people covered by Social Security's Old Age and Survivors Insurance Program. (3) Physicians fees would be set by the Department of Health, Education and Welfare. Free choice of physician would presumably be maintained. (4) raise monthly retirement payments to Social Security beneficiaries from \$205 to \$305.

Tennessee Firm Low Bidder on UK Med-Science Building

A contract with Foster and Creighton Company, Nashville, low bidder on construction of the medical science building at the University of Kentucky with a lump sum base bid of \$5,247,000, will probably be signed by the end of the month, according to William R. Willard, M.D., vice president of the Medical Center.

Ground breaking ceremonies were scheduled for December 10 as the Journal went to press. The first unit of the University Medical Center should provide excellent, functional facilities, according to Doctor Willard.

"With the architectural planning as far along as

it is, and with construction underway, our medical staff can begin to turn its attention to planning the educational program, especially the post graduate medical education program upon which we place a high priority," Doctor Willard said.

He expressed a firm hope that the medical science building would be far enough along so that a small class could be accepted in 1959. Expectations are that the hospital part of the Center will be placed under construction contract early in 1959.

Ed. Council for Foreign Med. Grads is "Open for Business"

"The newly formed Educational Council for Foreign Medical Graduates can perform a valuable service to hospitals and the medical licensing board here in Kentucky through its evaluation and certification of foreign applicants," according to J. Murray Kinsman, M.D., dean of the University of Louisville School of Medicine and president of the Council's Board of Trustees.

"It is hoped that in time the services of the Council, which include evaluation and certification of foreign medical graduates on the basis of their command of the English language and medical training, will be widely recognized," Doctor Kinsman said.

Russell Teague, M.D., State Commissioner of Health, who stated that Doctor Kinsman had explained the function of the Council at a recent meeting of the State Board of Health, expressed his appreciation for the formation of the Council and said he felt its services would be of great assistance to state boards.

The Council, an independent agency, has as its executive director, Dean F. Smiley, M.D., Chicago, former secretary of the Association of American Medical Colleges. It is directed by a Board of Trustees designated by the American Medical Association, the Association of American Medical Colleges, the American Hospital Association, the Federation of State Medical Boards of the U. S., the U. S. Department of Defense and the U. S. Department of Health, Education, and Welfare.

Doctor Smiley said the Council will carry out a detailed program for evaluating foreign medical graduates and will distribute information to foreign medical graduates on how to obtain certification.

Certification will involve a three-way screening process:

1. The Council will certify that a student's educational credentials have been checked and found meeting minimal standards—18 years of formal education, including at least four years in a bonafide medical school, but excluding hospital training.

2. The council will certify that the knowledge of English has been tested and found adequate for the needs of an internship in an American hospital.

3. The council will certify that the general knowledge of medicine, as evidenced by passing the American Medical Qualification Examination, is adequate for assuming an internship in an American hospital.

Results of the three-way screening will be supplied hospitals, state licensing boards and specialty boards designated by the foreign medical graduate. Each year the council will publish data on the numbers and placement of foreign medical graduates in the country.

Ky. Physicians Mutual Officers Elected on Nov. 7

Seven officers and three new members of the Board of Directors were elected at the annual meeting of Kentucky Physicians Mutual, Inc., in Louisville on November 7.

Officers of Kentucky's Blue Shield Plan re-elected for a one year term are: J. Duffy Hancock, M.D., Louisville, president; Coleman C. Johnston, M.D., Lexington, vice president; William H. Cartmell, M.D., Maysville, vice president; J. P. Sanford, Louisville, secretary; B. B. Baughman, M.D., Frankfort, treasurer; R. A. Dean, Sr., Louisville, assistant treasurer; D. Lane Tynes, Louisville, executive director Blue Cross Hospital Plan, Inc., Stanley T. Simmons, M.D., Louisville, medical consultant.

Elected to the Board of Directors are: Ward Bushart, M.D., Fulton; Ralph D. Lynn, M.D., Elkton; and Garnett J. Sweeney, M.D., Liberty.

Exhibit Plans for '58 Announced by AMA Bureau

To reach more and more Americans with authentic up-to-date health information, the AMA's Bureau of Exhibits has announced a number of major plans for 1958.

A new exhibit called "How We Breathe," presenting a three-dimensional model of the organs involved in breathing, will be ready for bookings after January 1, 1958. Two other exhibits are also well along in the planning stages for next year. They will feature the brain and the endocrine system.

Smaller editions of the popular "Life Begins" exhibit are also being built. All of these exhibits may be obtained through the KSMA Headquarters Office, 1169 Eastern Parkway, Louisville.

Dr. Boyd's Career Reviewed

Milestones in the career of Paducah surgeon, Frank Boyd, M. D., were reviewed in the Paducah Sun-Democrat on October 30.

Under the heading, "'Memory Day' A surgeon Relives His Milestones," the paper covered in detail Doctor Boyd's recollections of his 62 years of practice in Paducah. The 91-year-old physician who retired from active practice six years ago, had served on the staff of the Illinois Central Hospital in Paducah since 1913.

New Medicare Cards in Effect on January 1

The issuance date for the "Dependents' Medical Care Card (No. DD Form 1173) has been extended to January 1, 1958.

In the meantime, eligibility of dependents should continue to be determined on the present basis on the card which is now entitled, "Uniformed Service Identification and Privilege Card" (No. DD Form 1173). Eligibility on this card is indicated by the word "yes" after the word "civilian" in item 14. For others, the word "civilian" will be blocked out, indicating no coverage.

To clear up confusion which may exist regarding benefits that are provided through the plan for emergency care, the following points should be kept in mind.

The program is designed, primarily, for medical care in the hospital, and out-patient care is provided only in the following areas: 1. Obstetrical and maternity services. 2. Bodily injuries, limited to the treatment of fractures, dislocations, lacerations, and other wounds. 3. Diagnostic tests and procedures prior to and/or following hospitalization for the same bodily injury or surgical procedure for which hospitalized. 4. Radiation therapy prescribed during a period of hospitalization and continued or carried out on an out-patient basis.

This eliminates from coverage emergency care, not related to an obstetrical or injury case, that is performed in a doctor's office or clinic.

AMA Directory Goes to Press

The new 20th edition of the AMA Directory containing complete data on 260,000 physicians in the U. S. and Canada is now going to press and will be ready for shipment on September 1, 1958. It will contain 100,000 changes of address, biographical data on an additional 19,000 new physicians, as well as 14,000 changes in specialties and certifications by the Examining Boards for Medical Specialties.

Pre-publication price for all orders before January 1, 1958, is \$30 in U. S. and possessions, and \$33 outside U. S. and possessions. For all orders received and paid after January 1, the cost will be \$35 and \$38, respectively.

Eleventh District Meet in Berea on November 14

Approximately 40 members and their wives attended the annual dinner meeting of the 11th Councilor District at the Daniel Boone Tavern in Berea on November 14, according to Joe M. Bush, M.D., District Councilor.

KSMA President Edward B. Mersch, M.D., Covington, was a featured speaker at the dinner. His talk covered various legislative measures facing the profession.

The scientific section of the meeting was conducted by Benjamin D. Boone, M.D., a Louisville surgeon.



Courier-Journal Photo

Doctor and Mrs. William Hart Hagan, Louisville, who were on the ill fated Pan American Stratocruiser which crashed enroute to Honolulu on November 8 are shown in this picture taken in 1953. They were on their way to a meeting of the Pan-Pacific Surgical Association and had planned to vacation in Honolulu following the meeting. The Hagan's had one son William Hart, Jr., 10.

Cytology Lab Detects 119 Cases

Louisville's Cancer Cytology Laboratory has detected 119 cervical cancers in the first 25,000 women tested there, according to a report made by William M. Christophersen, M. D., to the Jefferson County Medical Society on the laboratory's progress on November 18.

Doctor Christophersen, head of the Pathology Department at the University of Louisville and pathologist in charge of the tests, said the 119 cancers were found among the 235 women on whom biopsies were conducted. In addition to the 119 cases detected, tests revealed 57 women with cell abnormalities that may eventually lead to cancer.

UL Med Students in Who's Who

Four University of Louisville Medical School students have been selected for listing in the 1958 edition of Who's Who Among Students in American Colleges and Universities.

Students chosen for the listing on the basis of scholarship and leadership include: Clarke Anderson, President of U of L Chapter of Student AMA, Arnold Belker, Paul Grider, and Morris Weiss, all of Louisville.

STUDENT AMA

During the past month, the local SAMA chapter was asked to make a statement defining its position in regard to the Forand bill. Since this is a matter of considerable importance to all physicians and medical students, it was felt that an accurate statement should be made: a statement which would reflect the opinions of the majority of medical students at our school. It was also felt that the statement should express the well founded opinions of any minority group, should such a group exist.

After consideration of various methods by which opinions could be sampled, it was decided that our purposes could best be served by a poll of the entire enrollment of the school. Information presented at the time of the poll is printed verbatim below.

SAMA Poll

A bill, No. HR 9467, has been introduced into the Congress by representative A. J. Forand of Rhode Island, a Democrat. The bill would provide federal support of hospital, surgical and nursing care for workers over the age of 65, for their beneficiaries, and for their survivors. This would be done through the auspices of the Social Security Act.

Specifically, the bill would provide three things: (1) Hospital care up to 60 days per year plus nursing home care up to a combined total of 120 days plus surgical service. (2) Raised compulsory social security tax base from the present \$4,200 to \$6,000 per year, and the rate on employer and employee by $\frac{1}{2}$ of 1 per cent. The tax for the self employed would be raised $\frac{3}{4}$ of 1 per cent. (3) Increased present social security payments to retired persons and survivors by as much as 50 per cent, i. e., the maximum monthly benefit would be \$305 instead of the present \$200.

Would you be for or against this bill? (Please check your choice below.)

For:

Against:

Undecided:

It was also decided that informal discussion of the issue would be encouraged while the poll was being taken.

The results of the poll were as follows: 222 students submitted an answer to the poll. 169 were against the Forand Bill, 23 were undecided about it, and 30 were in favor of the bill.

As would be the case in any group of medical students, a considerable amount of lively discussion followed the introduction of the poll. Certain well thought out arguments were advanced, both in favor and against the issue. Many students were against the Forand bill because they felt that it represented the beginning of governmental control—that must inevitably end in socialized medicine.

Many were opposed to the bill because it calls for an elevation of personal taxes, which they considered to be too high already. It might be added that a certain small group immediately rejected the bill because it had been introduced into Congress by a Democrat.

In almost every group polled a certain well spoken minority was in favor of the bill. These individuals asserted that a large group of citizens, i. e., workers over age 65, would unquestionably be benefited by its measures. They pointed out that the percentage of persons over the age of 65 is increasing steadily and that the problem of geriatric care is proportionately magnified. The spokesmen in favor of the bill did not feel that it represented socialized medicine, per se, but rather the mobilization of funds for medical care of a group which is clearly in need of better care. They felt that this money would eventually re-

side in the pockets of the medical profession and its allied fields.

In summary, it may be stated, that a clear majority of medical students at our school were opposed to the Forand bill for reasons stated above. An articulate minority was present which supported the bill for reasons also stated above. The opinions cited in this article are those of students at the University of Louisville School of Medicine only, and do not necessarily reflect the feelings of the School of Medicine, nor of the University, nor of the Student AMA as a whole.

Clarke Anderson, President
U of L Chapter, Student AMA

House of Delegates Appoints Committees for '57-'58

KSMA committees appointed by the House of Delegates to serve during 1957-58 have been announced by Clyde C. Sparks, M.D., Ashland, speaker of the House.

Physicians serving on the newly formed committees are:

Committee to Study the Constitution and Bylaws

Cooley L. Combs, Hazard, Chairman
Robert S. Dyer, Louisville
Wyatt Norvell, New Castle
Richard J. Rust, Newport
George H. Widener, Jr., Paducah

Committee on the Corporate Practice of Medicine

George F. Archer, Prestonsburg, Chairman
Clements W. Air, Ludlow
W. Clark Bailey, Harlan
Rankin C. Blount, Lexington
Marion O. Crowder, Owensboro
Stephen R. Ellis, Louisville
John T. Giannini, Louisville
B. B. Holt, Ashland
Burl Mack, Pewee Valley

Awards Committee

R. Ward Bushart, Fulton, Chairman
Hugh P. Adkins, Louisville
William H. Bizot, Louisville
Glenn U. Dorroh, Lexington
Barton L. Ramsey, Jr., Somerset

New Additions to KSMA Roster

Twelve new members have been added to the KSMA roster since the Journal's last report. They are:

James E. Bryan, M.D., Louisville
Eugene H. Conner, M.D., Louisville
William T. Daniel, M.D., Louisville
Wesley G. Farnsley, M.D., Louisville
Hoyt D. Gardner, M.D., Louisville
James T. Linville, M.D. Louisville
Russell Long, M.D., Frankfort
Roderick Macdonald, Jr., M.D. Louisville
Robert A. Stansbury, M.D., Louisville
James K. Tomkins, M.D., Louisville
C. J. Walton, M.D., Lakeland
Jean R. Williams, M.D., Louisville

President Appoints 38 Committees To Serve in 1957-58

Thirty-eight committees have been appointed by KSMA President Edward B. Mersch, M.D., Covington, to serve during 1957-58. Committees appointed by the KSMA House of Delegates are elsewhere on this page. Council appointed committees appeared in the November, 1957 Journal on page 1029.

Physicians who have been appointed to serve on Presidentially appointed committees are:

Committee on Scientific Assembly and Arrangements

Edward B. Mersch, Covington, Chairman
Robert W. Robertson, Paducah, Vice Chairman
Charles C. Rutledge, Hazard (term expires 1958)
Frank L. Duncan, Monticello (term expires 1959)
Beverly T. Towery, Louisville (term expires 1960)

Associate Committee on Post-Graduate Medical Education

Walter S. Coe, Louisville, Chairman
Harry S. Andrews, Louisville
Delmas M. Clardy, Hopkinsville
Allen L. Cornish, Lexington
Frank L. Duncan, Monticello
John C. Quertemous, Murray
Charles C. Rutledge, Hazard
Paul W. Simpson, Covington

Associate Committee on Scientific Exhibits

Everett L. Pirkey, Louisville, Chairman
Guy C. Cunningham, Ashland
Donald K. Dudderer, Newport
John B. Floyd, Lexington

Associate Committee on Technical Exhibits

Jesse T. Funk, Bowling Green, Chairman
Glenn W. Bryant, Louisville
A. B. Colley, Owensboro
Glenn U. Dorroh, Lexington
George H. Riley, Erlanger

Committee on Emergency Medical Service

Theodore L. Adams, Lexington, Chairman
L. L. Cull, Frankfort
Francis J. Halcomb, Scottsville
W. B. Haley, Paducah
Estill F. Hall, Owensboro
Stuart M. Hunter, Louisville
Robert E. Reichert, Covington
Charles F. Wood, Louisville

Committee to Study Relations with Voluntary Health Groups

K. Armand Fischer, Louisville, Chairman
Melvin C. Bernhardt, Louisville
Rankin C. Blount, Lexington
Paul Bryan, Ashland
Hugh Houston, Murray
John S. Llewellyn, Louisville
L. Hubert Medley, Owensboro
Dexter Meyer, Jr., Covington
A. F. Schultz, Newport

McDowell Home Committee

Charles A. Vance, Lexington, Chairman
Laman A. Gray, Louisville
O. Leon Higdon, Paducah
E. M. Howard, Harlan
Richard G. Jackson, Danville
Gladys Rouse, Florence
Norma T. E. Shepherd, Hopkinsville
Earl P. Slone, Lexington, Dean of College of Pharmacy, University of Kentucky

Committee on Rural Health

Wyatt Norvell, New Castle, Chairman 7th District
 Frank L. Duncan, Monticello,
 Vice Chairman 12th District
 Joseph R. Miller, Benton 1st District
 Nathan Canter, Owensboro 2nd District
 Ralph D. Lynn, Elkton 3rd District
 Dixie E. Snider, Springfield 4th District
 Everett N. Rush, Fern Creek 5th District
 Daryl P. Harvey, Glasgow 6th District
 Wilbur R. Houston, Erlanger 8th District
 Mitchell B. Denham, Maysville 9th District
 James S. Williams, Nicholasville 10th District
 Donald L. Graves, Frenchburg 11th District
 George P. Carter, Louisa 13th District
 Carl Pigman, Whitesburg 14th District
 Cecil W. Ely, Manchester 15th District

Committee on Labor Management Health Plans

J. Duffy Hancock, Louisville, Chairman
 Howell J. Davis, Owensboro
 Carl H. Fortune, Lexington
 G. Y. Graves, Bowling Green
 Eugene H. Kramer, Louisville
 Hugh Mahaffey, Richmond
 W. Vinson Pierce, Covington
 Clyde C. Sparks, Ashland

Associate Advisory Committee to U. M. W. A.

Carl Kumpe, Covington, Chairman
 George P. Archer, Prestonsburg
 W. Clark Bailey, Harlan
 Sam H. Flowers, Middlesboro
 J. Thomas Giannini, Louisville
 W. C. Hambley, Pikeville
 C. D. Snyder, Hazard
 Carroll L. Witten, Louisville

Advisory Committee to the Woman's Auxiliary

Louis M. Foltz, Louisville, Chairman
 R. Ward Bushart, Fulton
 Howard E. Dorton, Lexington

Committee on Medical Services

David M. Cox, Louisville, Chairman
 C. Walker Air, Ludlow
 Marion F. Beard, Louisville
 K. Armand Fischer, Louisville
 Robert J. Hoffman, South Fort Mitchell
 Joseph H. Humpert, South Fort Mitchell
 Hollis Johnson, Louisville
 Maurice Kaufmann, Lexington
 Kenton D. Leatherman, Louisville
 John J. Rolf, Covington
 George B. Sanders, Louisville
 Otto H. Salsbery, Covington
 Houston W. Shaw, Louisville
 Edwin P. Solomon, Jr., Louisville
 J. G. VanDermark, South Fort Mitchell

Associate Committee on Blood Banks

Marion Beard, Louisville, Chairman
 Samuel M. Adams, London
 H. C. Burkhard, Harlan
 Hubert C. Jones, Berea
 David Y. Keith, Paducah
 W. Mountjoy Savage, Maysville
 Thornton Scott, Lexington
 George R. Tanner, Florence

Associate Committee on Cancer

Houston Shaw, Louisville, Chairman
 Henry S. Collier, Louisville
 Russell H. Davis, Pikeville
 John L. Dixon, Owensboro
 William T. McElhinney, Covington
 Ernest C. Strode, Lexington

Associate Committee on Cerebral Palsy

Otto H. Salsbery, Covington, Chairman
 Irving A. Gail, Lexington
 Richard F. Grise, Bowling Green
 Julian R. Hardaway, Danville
 Vernard F. Voss, Louisville

Associate Committee on Crippled Children

K. Armand Fischer, Louisville, Chairman
 Daniel G. Costigan, Louisville
 Robert H. Cofield, Covington
 Thomas D. Yocum, Lexington

Associate Committee on Diabetes

Robert J. Hoffman, South Fort Mitchell, Chairman
 Herald K. Bailey, Ashland
 George Philip Carter, Louisa
 Marcus A. Coyle, Springfield
 Thomas J. Crume, Owensboro
 Arthur T. Hurst, Louisville
 Albert H. Joslin, Beaver Dam
 Esten S. Kimbel, Frankfort
 Franklin B. Moosnick, Lexington
 Stanley T. Simmons, Louisville

Associate Committee on Dietetics

Maurice Kaufmann, Lexington
 William E. Becknell, Manchester
 John E. Bickel, Owensboro
 William C. Bushemeyer, Louisville
 W. E. Hoy, Ashland

Associate Committee on General Practice

C. Walker Air, Ludlow, Chairman
 R. E. Davis, Central City
 Ruben N. Lawson, Lawrenceburg
 Homer B. Martin, Louisville
 Willett H. Rush, Frankfort
 Robert L. Sumner, Henderson
 Henry G. Wells, Georgetown

Associate Committee on Geriatrics and Long-term Illness

John J. Rolf, Covington, Chairman
 Thomas T. Brackin, Jr., Bardwell
 Martin H. Boldt, Louisville
 Burl Mack, Pewee Valley
 Earl P. Oliver, Scottsville
 Barton L. Ramsey, Somerset
 Sam D. Taylor, Henderson

Associate Committee on Industrial Medicine and Surgery

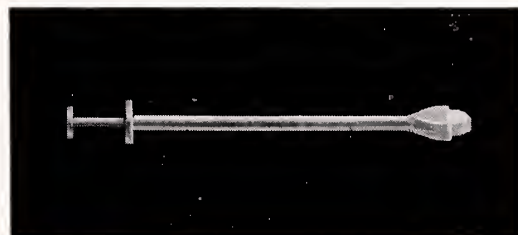
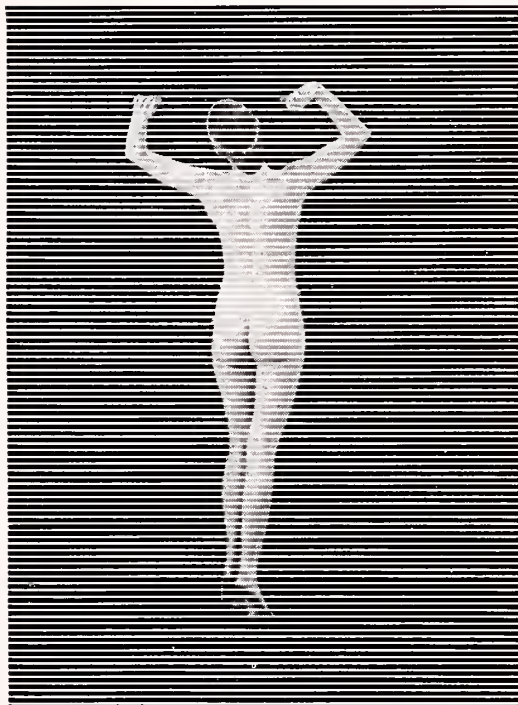
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 W. Vernon Lee, Covington
 J. E. Moore, Ashland
 Owen B. Murphy, Lexington
 Gracie Rowntree, Louisville
 Burton A. Washburn, Paducah

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The following therapeutic procedure is suggested: One or two tablets are inserted by the patient each night and each morning; treatment is continued for four to eight weeks.

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This smooth, unbreakable, plastic device is designed for simplified vaginal insertion of Floraquin tablets by the patient. It places tablets in the fornices and thus assures coating of the entire vaginal mucosa as the tablets disintegrate.

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 C. Howe Eller, Louisville
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John D. Handley, Hodgenville	4th District
Daryl F. Harvey, Glasgow	6th District
Shelby Hicks, New Castle	7th District
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Benjamin F. Allen, Flemingsburg	9th District
James S. Williams, Nicholasville	10th District
Vernon O. Kash, Winchester	11th District
Robert Breeding, Monticello	12th District
John F. Green, Sandy Hook	13th District
Carl Pigman, Whitesburg	14th District
Boyce E. Jones, London	15th District
Henry M. Wilbur, Louisville, Representing U. of L. School of Dentistry.	

KSMA Representative to Conference of Presidents and Other Officers of State Medical Association

Clyde Sparks, Ashland

KSMA Representatives on Joint Commission for Improvement of Patient Care

Arthur T. Hurst, Louisville, Chairman
 Winfrey P. Blackburn, Frankfort
 Cooley L. Combs, Hazard
 M. R. Walsh, Covington
 Albert Sam Warren, Lexington

KSMA Advisor to University of Louisville Student AMA Chapter

To be named

Senior Day Committee

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 Robertson O. Joplin, Louisville
 J. Murray Kinsman, Louisville
 Marvin A. Lucas, Louisville
 Lawrence T. Minish, Jr., Louisville

In Memoriam

JOHN H. CALDWELL, M.D.
Newport
1879 - 1957

John Hadley Caldwell, M. D., 78, a physician and surgeon in Newport for more than 50 years, died at Booth Hospital in Covington after several weeks' illness on October 22.

A Fellow of the American College of Surgeons, Doctor Caldwell graduated from the Ohio Medical School in 1906, and completed his internship and postgraduate training at the old Good Samaritan Hospital in Cincinnati. In 1956, he received a 50-year pin and certificate at a dinner meeting of the Campbell-Kenton Medical Society.

GORDON BENNETT CARR
Sturgis
1890 - 1957

Gordon Bennett Carr, M.D., 67-year-old physician and civic leader, died in the Sturgis Community Hospital on October 26.

A graduate of Vanderbilt University School of Medicine in 1916, Doctor Carr established the Community Hospital in 1930 and remained active in its affairs until his death. He was a member of the Hospital Licensure Council of Kentucky and was a past president of the Union County Medical Society.

WILLIAM HART HAGAN
Louisville
1921-1957

William Hart Hagan, M.D., died in the crash of a Pan American Stratocruiser 1,000 miles east of Honolulu on November 8. His body was one of 19 recovered after the crash. (As the Journal went to press, the body of his wife, Norma, who accompanied him on the Honolulu flight had not been recovered).

Doctor Hagan, 37, a surgeon, had been associated in practice with his father, H. Hart Hagan, M.D., since 1952. A graduate of Harvard Medical School in 1945, he interned at John Hopkins University and took his residency training at the University of Pennsylvania. He was a veteran of World War II and served with the medical corps in Puerto Rico in 1947.

JOHN C. MCKISSICK, M.D.
Bowling Green
1902 - 1957

John C. McKissick, M.D., past president of the Warren, Edmonson, and Butler County Medical Society, died of a heart attack at his home in Bowling Green on October 29.

Doctor McKissick, who limited his practice to eye, ear, nose, and throat, was an overseas veteran of World War II and the Korean War and had held the rank of colonel in the Army Medical Corps. He was a graduate of Vanderbilt University School of Medicine in 1929.

JOSEPH FREHLING, M.D.
Louisville
1901 - 1957

Joseph Frehling, M.D., a general surgeon in Louisville for 30 years, died of a heart attack at Jewish Hospital in Louisville on November 1.

A native of Louisville, Doctor Frehling was a graduate of the University of Maryland Medical School in 1924. He was active in community, religious, and medical organizations and had served as president of the medical staff of the Jewish Hospital.

EARL MOORMAN, M.D.
Huntington, W. Va.
1881 - 1957

Earl Moorman, M.D., a native of Breckinridge County, died October 18 in Huntington, West Virginia, at the age of 76.

Doctor Moorman was a psychiatrist with the Veterans Administration in Huntington, before retiring last year. A graduate of the University of Louisville School of Medicine, he served as psychiatrist at the base hospital for the old Camp Zachary Taylor during World War I, and before going to Huntington had served with the VA in Indiana and Connecticut.

GALEN E. JASPER, M.D.
Somerset
1865 - 1957

Galen E. Jasper, M.D., who had served the people of Pulaski County for nearly 60 years, died in Somerset on October 18 after an illness of nine months.

A graduate of the old Kentucky School of Medicine in Louisville in 1902, Doctor Jasper, was a life-long resident of Pulaski County. He was considered one of the oldest doctors in Southeastern Kentucky, both in age and years of medical service.

IN THE BOOKS

(Continued from Page 1079)

action, he stated that he was surprised that anyone had found out so precisely as some of these men had stated, and to make a positive statement that they knew how these drugs operated on what particular part of the brain. He also took up the problem of testing to indicate all the pitfalls that go into testing and the control of tension level that was advanced by some of the writers.

It was significant also, that most authors drifted into the areas of drugs other than Meproamate. While they seemed to feel in general that they were satisfied with Meproamate, they leaned heavily toward Chlorpromazine and other like drugs. Clinically, many were very pleased with the effect of Meproamate on psychoneuroses. This report would be of value to research, but of little aid to the average clinician.

LOUIS M. FOLTZ, M. D.

"Operation Cleanup" Underway

"Operation Cleanup"—a drive aimed at stepping up polio immunization activities—is now in process and physicians throughout the nation have been asked to participate by the AMA Committee on Poliomyelitis.

During November, the AMA sent sample cards to every physician in the country, together with a letter from David B. Allman, M. D., AMA president. The cards are designed for each doctor to send to his patients—the orange one urging them to get polio shots if they haven't already done so; the blue reminding those who are ready for their third shot. By filling out a special order form, a physician may have as many of these as he wants.

TB Coordinating Council Elects

J. C. McGuire, M.D., of the State Department of Health, was recently elected chairman of the Tuberculosis Coordinating Council to succeed Joseph Humpert, M.D., Covington, whose term expired.

Other officers include: Mrs. Marjorie C. Tyler, vice chairman; and Thomas Layton, Frankfort, secretary. The Council which coordinates care of tuberculosis patients in Kentucky is made up of members from the Kentucky State Medical Association, the State TB Commission, the State TB hospitals, the State Department of Health, the State Board of Nursing Registration, the Kentucky State Association of Registered Nurses, and the Kentucky TB Association.

FOR QUICK SALE

Office furnishings and equipment with small laboratory, and full supply of surgical instruments at Hospital. Priced for immediate sale. Call JU 4-3914 for appointment.

FULL TIME PHYSICIAN WANTED

Wanted—Full time physician for tuberculosis hospital in Paris or Glasgow. Must be American citizen. Salary \$9500 per year plus full family maintenance including apartment, food, laundry, and utilities. Qualified applicants should contact Thomas M. Layton, Executive Director, State Tuberculosis Hospital Commission, New Capitol Annex, Frankfort, Kentucky.

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ACHROCIDIN is indicated for prompt control of undifferentiated upper respiratory infections in the presence of questionable middle ear, pulmonary, nephritic, or rheumatic signs; during respiratory epidemics; when bacterial complications are observed or expected from the patient's history.

Early potent therapy is provided against such threatening complications as sinusitis, adenitis, otitis, pneumonitis, lung abscess, nephritis, or rheumatic states.

Included in this versatile formula are recommended components for rapid relief of debilitating and annoying cold symptoms.

Adult dosage for ACHROCIDIN Tablets and new, caffeine-free ACHROCIDIN Syrup is two tablets or teaspoonfuls of syrup three or four times daily. Dosage for children according to weight and age.

Available on prescription only

*symptomatic
relief... plus!*

ACHROCIDIN

TETRACYCLINE-ANTIHISTAMINE-ANALGESIC COMPOUND



Tablets

Each tablet contains:

ACHROMYCIN® Tetracycline	125 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
Salicylamide	150 mg.
Chlorothen Citrate	25 mg.

Syrup

Each teaspoonful (5 cc.) contains:

ACHROMYCIN® Tetracycline equivalent to tetracycline HCl	125 mg.
Phenacetin	120 mg.
Salicylamide	150 mg.
Ascorbic Acid (C)	25 mg.
Pyridamine Maleate	15 mg.
Methylparaben	4 mg.
Propylparaben	1 mg.

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1957 CONSTITUTION AND BY-LAWS OF THE KENTUCKY STATE MEDICAL ASSOCIATION

Revised September 18, 1957

CONSTITUTION

Article I.	Name of the Association
Article II.	Purpose of the Association
Article III.	Component Societies
Article IV.	Composition of the Association
Article V.	House of Delegates
Article VI.	Sections and District Societies
Article VII.	Sessions and Meetings
Article VIII.	Officers
Article IX.	Funds and Expenses
Article X.	Referendum
Article XI.	The Seal
Article XII.	Amendments
Article XIII.	Meaning of Term "County Societies"

BY-LAWS

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Chapter II.	Annual and Special Sessions of the Association
Chapter III.	General Meeting
Chapter IV.	House of Delegates
Chapter V.	Election of Officers
Chapter VI.	Duties of Officers
Chapter VII.	The Council
Chapter VIII.	Committees
Chapter IX.	Assessments and Expenditures
Chapter X.	Rules of Conduct
Chapter XI.	Rules of Order
Chapter XII.	County Societies
Chapter XIII.	Amendments

CONSTITUTION

Article I. Name of the Association

The name and title of this organization shall be the Kentucky State Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge, and the advancement of medical science and charity, to the elevation of the standard of medical education and to the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and to the guarding and fostering of their material interest; to protect the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problem of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition of the Association

The Association shall consist of the members of the component societies and the House of Delegates shall have authority to adopt By-laws regulating the admission and classification of members as deemed advisable.

Article V. House of Delegates

Section 1. The House of Delegates shall be the legislative and business body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt by-laws to carry out the provisions of this Constitution.

Section 2. Delegates shall be members of and

elected by component societies in accordance with the by-laws. Officers of the Association and delegates to the American Medical Association and the five immediate past-presidents shall be ex-officio members of the House of Delegates and entitled to vote.

Section 3. The speaker or vice-speaker shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie vote.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VI. Sections and District Societies

The House of Delegates may provide a division of the scientific work of the Association into appropriate Sections and for the organization of such Councilor District Societies as will promote the best interest of the profession, such societies to be composed exclusively of members of component societies.

Article VII. Sessions and Meetings

The Association shall hold an annual session and such special sessions as may be desirable in accordance with the by-laws of the Association.

Article VIII. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, three Vice-Presidents, a Secretary, a Treasurer, a Speaker and Vice-Speaker of the House of Delegates, and a Councilor from each Councilor District that may be established and such other officers as provided for in the by-laws.

Section 2. The officers of the Association shall serve for the term of office and subject to provisions as specified in the by-laws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. The officers of the Association shall be elected by the House of Delegates at the annual session of the Association and shall take office on the last day of the annual meeting.

Article IX. Funds and Expenses

Funds for meeting the expenses of the Association shall be arranged for by the House of Delegates by an equal per capita assessment upon each county (component) society to be fixed by the House of Delegates by voluntary contribution and from other sources of revenue. Funds may be appropriated by the House of Delegates to defray the expenses of the Annual Session, for publication and for such other purposes as will promote the welfare of the Association and profession.

Article X. Referendum

The General Meeting of the Association may, by a two-thirds vote, order a general referendum upon any question pending before the House of Delegates, and the House of Delegates may, by a similar vote of its own members or after a like vote of the General Meeting, submit any such question to the membership of the Association for a final vote; and if the persons voting shall comprise a majority of all the members, a majority of such vote shall determine the question and be binding upon the House of Delegates.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates

registered at the Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Meaning of Term "County Societies"

Anywhere in the Constitution, Articles of Incorporation, or Bylaws in which the term county society, or county societies, component county society or component medical society appears, it shall be construed to mean component society.

BY-LAWS

Chapter I. Membership

Section 1. A member of this Association must be a member of one of the component societies and when certified to the Secretary of the Association as a member of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary of the Association the name of the member shall be included in the official roster of the Association and the member shall be entitled to all the privileges of his class membership.

Section 2. Membership in the Association shall be divided into six classes, to wit: Active, Associate, Inactive, Emeritus, Student, and Honorary.

(a) **Active Members.** The active membership of the Association shall consist of the active members of the various component county medical societies. To be eligible for active membership in any component county society, the applicant must be a doctor of medicine of good moral, ethical, and professional standing, who is licensed to practice medicine in Kentucky.

(b) **Associate Members.** The associate membership of the Association shall consist of the associate members of the various component county medical societies. To be eligible for associate membership in any component county society, the applicant must be ineligible for active membership and qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other governmental service while on duty in the State.

(2) Interns, residents or teaching fellows who are doctors of medicine and who have complied with all pertinent regulations of the State Board of Health.

County societies may also invite dentists, pharmacists, funeral directors, or other professional persons to become associate members.

Associate Members shall not have the right to vote nor to hold office, but shall receive The Journal and other publications of the Association.

(c) **Inactive Members.** The inactive membership of the Association shall consist of the inactive members of the various component county medical societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive The Journal and other publications of the Association.

(d) **Emeritus Members.** Component societies may elect as a member-emeritus any doctor of medicine who has retired from active practice and who has previously maintained active membership in good standing in his own society for twenty years or more. Emeritus members shall not have the right to vote nor to hold office and shall not pay dues, nor shall they be entitled to the benefits of Chapter VII, Section 10 of these by-laws. They shall receive The Journal and other publications of the Association.

(e) **Student Members.** Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. Student members shall not have the right to vote nor hold office. They may apply directly to the State Association for membership and be assigned to the county society of their choice. Student members shall receive The Journal of the Association. The membership year for student members shall run from September 1 to August 31 of each year.

(f) **Honorary Members.** Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privilege of the floor in all scientific sessions.

Section 3. **Guests of Honor.** Any distinguished physician not a resident of this State may become a guest of honor during any annual session upon invitation of the Association or its Council and shall be accorded the privilege of participating in all of the scientific work of that session.

Section 4. The name of a physician upon the properly certified roster of members or list of delegates of a chartered county society which has paid its annual assessment, shall be prima facie evidence of his right to register at the Annual Session in the respective bodies of this Association.

Section 5. No persons who are under sentence of suspension or expulsion from any component society of this Association, or whose name has been dropped from its rolls of membership, shall be entitled to any of the rights or benefits of this Association or its proceedings until such time as he has been relieved of such liability.

Section 6. Each member in attendance at the Annual Session shall enter his name on the registration book indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member or delegate shall take part in any of the proceedings of an annual session until he has complied with the provision of this section.

Chapter II. Annual and Special Sessions of the Association

The Association shall hold an annual session and such special session at such times and places as may be determined by the House of Delegates. All sessions shall be limited to the scientific, educational, legislative, economic and business activities of the Association. Such special sessions shall be held in accordance with the provisions of Chapter IV, Section 1 of the by-laws.

Chapter III. General Meeting

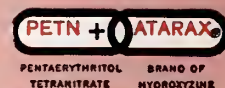
The General Meeting shall include all registered active members, associate members, and guests. Associate members and guests shall not have the right to vote on pending questions, but shall have equal rights with active members to participate in the proceedings and discussions. Each General Meeting shall be presided over by the President or in his absence or disability or upon his request, by one of the Vice-Presidents. Before it, at such time and place as may have been arranged, shall be delivered the annual address of the President, and the entire time of the sessions as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Chapter IV. House of Delegates

Section 1. The House of Delegates shall meet annually at the time and place of the Annual Session of the Association and shall so fix its hours of

*"the value of analgesic and tranquilizing agents
should be clearly recognized in the management of [angina]..."¹*

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links freedom from anginal attacks with a shelter of tranquility

In pain. Anxious. Fearful. On the road to cardiac invalidism. These are the pathways of angina patients. For fear and pain are inextricably linked in the angina syndrome.

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Dosage and supplied: begin with 1 to 2 yellow tablets (10 mg. PETN plus 10 mg. ATARAX) 3 to 4 times daily. This may be increased for maximal effect by switching to *pink* tablets (20 mg. PETN plus 10 mg. ATARAX). In bottles of 100.

CARTRAX should be taken *before* meals, on a *continuous* dosage schedule. Use with caution in glaucoma.

1. Russek, H. I.: J. Am. Geriat. Soc. 4:877 (Sept.) 1956.

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New York 17, New York



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meeting as not to conflict with the first General Meeting of the Association, or with the meeting held for the address of the President so as to give delegates an opportunity to attend the other scientific proceedings and discussions so far as is consistent with their duties. But if the business interest of the association and profession require, it may meet in advance or remain in session after the final adjournment of the General Meeting. The House of Delegates may be called into special session by the President with the approval of the Council and a special session of the House of Delegates shall be called by the President on a written request of the delegates representing fifty or more component county societies. When such special session is called, the Secretary shall mail a notice of the time and place and purpose of such meeting to the last known address of each member of the House of Delegates at least ten days before such special session.

Section 2. In the event there is no duly authorized delegate in attendance at the regular meeting of the House of Delegates the President shall consult any duly elected officer of the component society who is in attendance and with the approval of the Credentials Committee may appoint any active member of the component society in attendance at the meeting as the delegate. In the event there is no duly elected officer of the component society in attendance, the President may make the said appointment with the approval of the Credentials Committee. All appointments made shall also be with the approval of the House of Delegates.

Section 3. A majority of the registered delegates shall constitute a quorum and all of the meetings of the House of Delegates shall be open to members of the Association. The House of Delegates shall have the right to go into executive session whenever such action is indicated in the judgment of the House of Delegates, except that active members of the Association shall have the right to attend all executive sessions.

Section 4. Each resolution introduced into the House of Delegates shall be in writing and signed by the author and presented to the Secretary following its introduction. If the author be an individual member, it shall be signed by him. If the author be a group of members, it shall be signed by the authorized spokesman for that group. Immediately after the Delegate has introduced the Resolution, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 5. No new business shall be introduced in the last meeting of the House of Delegates without unanimous consent of the Delegates except when presented by the Council. All new business so presented shall require three-fourths affirmative vote for adoption.

Section 6. It shall, through its officers, Advisory Council, and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Session a stepping stone to further ones of higher interest.

Section 7. It shall consider and advise as to material interest of the profession, and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Section 8. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who can be made reputable, has been brought under medical society influence.

Section 9. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 10. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Section 11. It shall upon application provide and issue charters to county societies organized to conform to the spirit of the Constitution and By-Laws.

Section 12. In sparsely settled sections two or more County Societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The County Society thus combined shall not lose any of its privileges and representation. The active members of each County Society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the State Association.

Section 13. The state shall be divided into the following councilor districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Davies, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Spencer, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, and Trimble.

No. 8—Boone, Campbell and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

Councilor district meetings may be held as desired, and District Medical Associations may be organized as desired according to the districts outlined above.

Section 14. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 15. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Section 16. A digest of proceedings of the House of Delegates shall be published in the Journal of the Association.

Chapter V. Election of Officers

Section 1. The President-Elect and the Vice-Presidents shall be elected for a term of one year. The Speaker and Vice-Speaker of the House of Delegates shall be elected for a term of three years. The Secretary and Treasurer shall be elected for a term of five years. The Councilors shall be elected for a term of three years and shall be limited to serving for not more than two consecutive terms. The terms shall be so arranged that one-third of the terms expire each year, insofar as possible. No member shall be eligible for the office of President, President-Elect, Vice-

President, Speaker or Vice-Speaker of the House of Delegates, or Councilor who has not been an active member of the Association for at least five years.

Section 2. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting continue until an election occurs in like manner.

Section 3. Any member known to have directly or indirectly solicited votes for, or sought any office within the gift of this Association shall be ineligible for any office for two years.

Section 4. The election of officers shall be held during the closing session at the regular annual meeting of the House of Delegates.

Section 5. During the last session of the House of Delegates the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the nominating committee for the next year. The five names receiving the most votes shall form the committee. The Committee shall select one of its members as chairman at an organization meeting held during the County Society Officers' Conference, or at some other appropriate place designated by the Council at least four months before the Annual Meeting. The Committee, in addition to such other sessions as it may choose to hold, will schedule an open meeting immediately after the close of the first session of the House of Delegates at each Annual Meeting. This open session shall be held in the same meeting hall, shall receive broad publicity, and those who have business to discuss with the Committee shall have a hearing. Following this meeting, the Committee shall announce its final recommendations at the beginning of the second scientific session the following day, the Committee submitting one or more names for each officer to be elected. The House of Delegates will vote on the nominees at its second session. Additional nominations may be made from the floor by submitting the nominations without discussion or comment.

Section 6. The Delegates from the counties in each Councilor District shall form the Nominating Committee for the purpose of nominating a Councilor for the Councilor District concerned. This committee shall hold a meeting open to all active members of Councilor District concerned who are in attendance at the meeting for the purpose of discussing the nomination for the Councilor to serve the District. Additional nominations may be made from the floor by any member of the House of Delegates when the Nominating Committee makes its report to the House of Delegates.

Chapter VI. Duties of Officers

Section 1. The President shall preside at all general meetings of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office and so far as practicable, shall visit by appointment, the various sections of the State and assist the Councilors in building up the county societies and in making their work more practical and useful.

Section 2. The President-Elect shall be a member of the Committee on Scientific Assembly. He shall become President of the Association at the next annual meeting of the Scientific Session following his election as President-Elect. He shall assist the President in visitation of county and other meetings and shall be ex-officio a member of the House of Delegates with the right to vote. In event of death, resignation, or if he becomes permanently disqualified, his successor shall be elected by the House of Delegates and shall be installed as President of the Asso-

ciation at the next annual meeting of the Scientific Session of the Association.

Section 3. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of his death, resignation, or removal, the Council shall elect one of the Vice-Presidents to succeed him.

Section 4. The Speaker of the House of Delegates of the Association shall preside at all meetings of the House of Delegates. He shall appoint all committees for the House of Delegates with the approval of the House of Delegates. He shall be an ex-officio member of all said committees. He shall perform such other duties as custom and parliamentary usage may require.

Section 5. The Vice-Speaker shall assume the duties of the Speaker in his absence, and shall assist the Speaker in the performance of his duties. In the event of the death, resignation, or removal of the Speaker, the Vice-Speaker shall automatically become Speaker of the House of Delegates.

Section 6. The Treasurer shall demand and receive all funds due the Association, together with the bequests and donations. He shall, under the direction of the House of Delegates sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Secretary or the Executive Secretary and shall be counter-signed by the Treasurer of the Association. Under unusual circumstances, when one or more of the above-named officials are not readily available, the President of the Association or the Chairman of the Council is authorized to sign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a counter-signature. All five officials shall be required to give bond in an amount to be determined by the Council. The Treasurer shall subject his accounts to an annual audit under the direction of the Council. He shall render an annual account of his doings and the state of all Association funds.

Section 7. The Secretary shall advise the Executive Secretary in all secretarial matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and By-Laws, and in the event of the death, resignation or removal of the Executive Secretary, shall assume the duties of that office until the vacancy is filled.

Chapter VII. The Council

Section 1. The Council shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred on the House of Delegates by the Constitution and By-Laws. The Council shall consist of the duly elected Councilors. The President, the President-elect, the three Vice-presidents, the immediate Past-president, the Speaker of the House of Delegates, the Secretary, the Treasurer and the Delegates to the American Medical Association shall be ex-officio members of the Council with the right to vote. The Executive Committee of the Council shall consist of the President, the President-elect and the Secretary of the Association, together with the Chairman of the Council, Vice-chairman of the Council and two additional councilors to be elected annually by the Council. Between sessions of the Council, the Executive Committee shall exercise all of the powers belonging to the Council except those powers specifically reserved by the Council to itself.

Section 2. The Council shall hold daily meetings during the annual session of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three councilors. It shall meet on the last day of the Annual Session of the Association for reorganization and for the outlining of the work for the ensuing year. At

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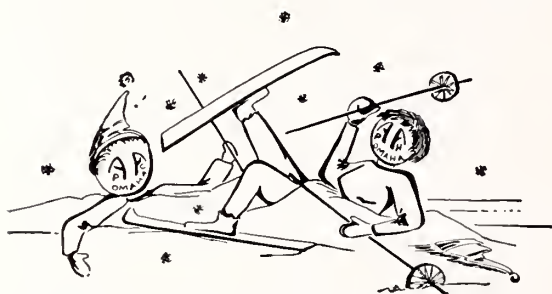
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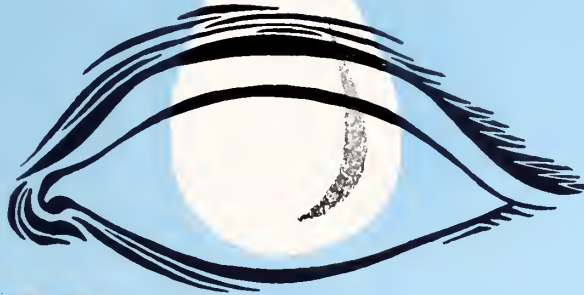
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this meeting it shall elect a chairman and secretary, and it shall keep a permanent record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided which report shall include an audit of the account of the Secretary and Treasurer and other agents of this Association and shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. In the event of a vacancy in any office the Council may fill the same until the annual election.

Section 3. Each Councilor shall be organizer, peace-maker and censor for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession and for improving and increasing the zeal of the county societies and their members. He shall likewise hold at least one councilor district meeting each year in order to afford a forum for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Councilor in the line of his duties herein imposed may be allowed by the House of Delegates upon a proper itemized statement, but this shall not be construed to include his expenses in attending the Annual Session of the Association.

Section 4. Collectively the Council shall be the Board of Censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates of the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or a county society upon which appeal is taken from the decision of an individual Councilor. Its decision in all such cases shall be final.

Section 5. The Council shall have the right to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters to the public and the lay press. Such communications shall be signed by the President of the Association and the Chairman of the Council as such.

Section 6. The Journal of the Kentucky State Medical Association shall be the official organ of the Association and shall be published under the supervision of the Council. The Editor of the Journal shall be elected by the Council. All money received by the Journal or any member of its staff shall be paid to the Treasurer of the Association on the first of each month. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 7. All reports on scientific subjects and all scientific discussions and papers read before the Association shall be referred to the Journal of the Kentucky State Medical Association for publication. The editor, with the consent of the Councilor for the District in which he resides, may curtail or abstract papers or discussions, and the Council may return any paper to its author which it may not consider suitable for publication.

Section 8. All commercial exhibits during the Annual Session shall be within the control and direction of the Council.

Section 9. In the event the office of one of the District Councilors is vacated between the meetings of the House of Delegates, the President of the Association may call a meeting of the delegates of record in the Headquarters Office from the counties of that district for the purpose of submitting one or more nominees as candidates to fill the office until the next meeting of the House of Delegates. The name or names of the nominee or nominees shall be submitted to the Council, which will elect a Councilor from

them to serve until the next meeting of the House of Delegates.

Section 10. A Medico-Legal Administrator shall be appointed by the Council of the Association to serve for a term of three years. The Executive Committee of the Council shall act in an advisory capacity to the Administrator. The Association, through the Administrator shall, upon the request of any member in good standing who is a defendant in a professional liability suit, provide such member with the consultative service of competent legal counsel selected by the Administrator acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Council outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Council to defend such suit through one court.

Section 11. The Council shall employ an Executive Secretary whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Council. His compensation shall be fixed by the Council. The Executive Secretary shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and By-Laws upon the officers, councilors, committees, boards, and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the annual sessions, the meetings of the House of Delegates, the meetings of the Council, as many of the committee meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers and committees of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Council.

He shall be the custodian of the general papers and records of the Association (including those of the Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees of their appointments and duties.

He shall account for and promptly turn over to the Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Treasurer. He shall, within thirty days preceding each annual session, submit his financial books and records to a certified accountant, approved by the Council, whose report shall be submitted to the House of Delegates.

He shall keep a card index register of all practitioners of the State by counties, noting on each his status in relation to his county society and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor of the Journal of the Kentucky State Medical Association under supervision of the Council and in a similar capacity to the extent that other publications are authorized by the House of Delegates.

He shall perform such additional duties as may be required by the House of Delegates, the Council, or the President, and shall employ such assistants as the Council may direct. He shall serve at the pleasure of the Council, and in the event of his death, resignation, or removal, the Council shall have the power to fill the vacancy. From time to time, or as directed by the Council, he shall make written reports to the

Council and House of Delegates concerning his activities and those of the Headquarters Office.

Chapter VIII. Committees

Section 1. The Standing Committees shall be as follows:

A Committee on Scientific Assembly and Arrangements

A Committee on Public Information and Service

A Committee on Medical Education and Economics

A Committee to Study Constitution and By-Laws

A Legislative Committee

and such other committees as may be necessary. The Headquarters Office at 1169 Eastern Parkway, Louisville 17, Kentucky, shall be the headquarters for all committees and activities of the Association except as may be specifically authorized by the Executive Committee. Committees shall be appointed by the President of the Association in conference with the Secretary unless otherwise specified. The President, Secretary and General Manager, and Executive Secretary shall be ex-officio members of all committees serving without power to vote except as otherwise specified.

Section 2. The Committee on Scientific Assembly and Arrangements shall consist of five members. The President of the Association shall be a member and Chairman of the Committee. The President-Elect shall be a member of the Committee and Vice Chairman thereof. The remaining three members shall serve for terms of three years each, with the term of one member expiring each year and the vacancy filled by appointment of the President. The Chairman of the Committee on Scientific Exhibits and the Chairman of the Committee on Technical Exhibits shall be ex-officio members of the Committee. The Committee shall determine the character and scope of the scientific proceedings of the Association subject to the constitution and by-laws and the instructions of the House of Delegates or of the Council, and to that end may invite the Chairman of its subcommittee to meet and consult with it. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions, and other business shall be presented, which program shall be adhered to by the Association as nearly as practicable. No county society as such shall serve as host society to the annual meeting.

Section 3. A Committee on Public Information and Service shall be appointed by the Council of the Association whose members shall serve at the discretion of the Council. The Council will annually designate its chairman. It shall be the duty of this committee to keep in active touch with public opinion. It shall keep the public informed of such developments that will constitute a service to the public. It shall promote such immediate and long-range educational programs, both to the public and within the profession, as are deemed in the best interest of both. Its work shall be done with dignity becoming a great profession and that wisdom which makes effective its work and influence.

Section 4. The Committee on Medical Education and Economics shall be appointed by the Council whose members shall serve at the pleasure of the Council. The Council shall annually designate the chairman of the committee. It shall be concerned with and responsible for all matters of Medical Education and Medical Economics which shall be within the province of the State Medical Association. It shall continually strive to serve as a liaison between the public and the Medical Association in those matters.

Section 5. The Committee to Study the Constitution and By-Laws shall be appointed by the Speaker of the House of Delegates acting in conjunction with the Vice Speaker and the Nominating Committee and shall make a continuing study of the Constitution and By-Laws. The Committee shall annually recommend to the House of Delegates such revisions as changing times and conditions dictate.

Section 6. The Legislative Committee shall be appointed annually by the Council of the Association whose members shall serve at the pleasure of the Council. The Council shall each year designate the chairman of the committee. Under the direction of the Council, it shall represent the Association in securing and enforcing legislation in the interest of public health and the science of medicine.

Chapter IX. Assessments and Expenditures

Section 1. The annual dues for membership in this Association shall be as follows: (1) **Active Members, \$35.00**, except Active Members who devote all of their time to teaching or research and have no private practice, \$25.00; (2) Associate Members, \$8.00; (3) Inactive Members, \$8.00; (4) Emeritus Members, no dues; (5) Student Members, \$1.00; (6) Honorary Members, no dues. Dues fixed by these by-laws shall constitute assessments against the component societies. The Secretary of each county society shall forward its assessment together with its roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Association on the first day of January in each year.

Section 2. Any county society which fails to pay its assessments, or make the report required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have the prior approval of the Council before they can become effective.

Chapter X. Rules of Conduct

The principles set forth in the Principles of Ethics of the American Medical Association shall govern the conduct of members in their relation to each other and to the public.

Chapter XI. Rules of Order

The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, unless otherwise determined by a vote of its respective bodies.

Chapter XII. County Societies

Section 1. All county societies now in affiliation with the State Association or those that may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws shall upon application to the House of Delegates, receive a charter from and become a component part of this Association.

Section 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Charters shall be issued only upon approval of the House of Delegates and shall be signed by the President and Secretary of this Association. The House of Delegates shall have authority to revoke the charter of any component county society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Section 4. Only one component society shall be chartered in any county except that the House of Delegates may issue a charter to one state-wide society of worthy Negro physicians who are not members of any county society. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky State Medical Association. When more than one county society exists friendly overtures and concessions shall be made with

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Lewis, H. H.; Frumess, G. M., and Henschel, E. J.: *Rocky Mountain M. J.* 54:806 (Aug.) 1957.

"Results of treatment with oleandomycin-tetracycline of 50 infections [mostly respiratory] due to resistant organisms and 40 infections [respiratory, skin, urinary infections] due to sensitive organisms are very encouraging. In some of these patients, [Signemycin] was lifesaving, and in others surgery was made unnecessary. This confirms other reports."

Shubin, H.: *Antibiotic Med. & Clin. Therapy* 4:174 (March) 1957.

Based on case reports documented by independent investigators in 26 countries abroad, the clinical response obtained with Signemycin in 1404 patients with a wide variety of infections was successful in 1329 patients; in 13 cases only was it necessary to discontinue therapy because of side effects.

Report on 1404 Cases Treated with Signemycin: Medical Department,

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In 50 nonselected patients, Signemycin "...appears to be effective in the treatment of most general surgical infections, including virulent staphylococcus aureus infections. In some cases these infections had been clinically resistant to other antibiotics. The drug is apparently well tolerated."

Levi, W. M., and Kredel, F. E.: *J. South Carolina M. A.* 53:178 (May) 1957.

Of 50 patients with various infectious processes, 26 had not responded to previous antibiotic therapy. With Signemycin "Ninety-six per cent of the mixed infections were clinically controlled. . . and in none of the cases was there any reason to discontinue the drug."

Winton, S. S., and Chesrow, E.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 55.

Signemycin in 79 patients with severe soft tissue infections: "The average response of these cases was excellent and inflammatory symptoms subsided with almost uniform rapidity....The magnitude and incidence of surgical intervention was reduced....Side reactions were minimal. . ."

LaCaille, R. A., and Prigot, A.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 67.

Five groups of patients (total 211) with acne were treated with one of five antibiotic agents, including Signemycin (55 cases). "The results were evaluated taking into consideration the usual response to such conservative conventional therapy and the rapidity of response." In 8 weeks, Signemycin rapidly attained and maintained the highest percentage of efficacy of antibiotic agents tried.

Frank, L., and Stritzler, C.: *Antibiotic Med. & Clin. Therapy* 4:419 (July) 1957.

In the treatment of 78 patients with tropical infections, some complicated by multiple bacterial contamination or present for years, Signemycin was found to be "...an exceptionally effective agent," requiring smaller doses and less extended periods of therapy than with the tetracyclines alone, and "caused no notable toxic reactions."

Loughlin, E. H., and Mullin, W. G.: *Antibiotics Annual 1956-1957*, New York, Medical Encyclopedia, Inc., 1957, p. 63.

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the aid of the Councilor of the District if necessary and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Section 5. Each county society shall judge of the qualifications of its own members. All active members of the component county societies shall be active members of the Kentucky State Medical Association.

Section 6. Any physician who may feel aggrieved by the action of the society of the county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, which upon a majority vote may permit him to become a member of an adjacent county society.

Section 7. In hearing appeals, the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual councilors in district and county work, effort at conciliation and compromise shall precede all such hearings.

Section 8. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 9. A physician living in or near a county line may hold membership in that county most convenient for him to attend, on permission of the county in whose jurisdiction he resides.

Section 10. Each county society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county, and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Section 11. Frequent meetings shall be encouraged, and the most attractive programs arranged that are possible. The younger members shall be especially encouraged to do post-graduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 12. At the time of the annual election of officers each component society shall elect a delegate or delegates to represent it in the House of Delegates

of the Association. The term of a delegate is from the beginning of the annual meeting of the House to which he was elected to serve to the beginning of the next annual meeting, but it may be for one or more years at the discretion of the county society. Each component society may be represented by one delegate for each 25 members in good standing plus one delegate for one or more members in excess of multiples of 25. Provided, however, that each component society shall be entitled to at least one delegate regardless of the number of members it may have and the secretary of the society shall send a list of such delegates to the secretary of this Association not later than 45 days before the next annual session. It shall be the obligation of the county medical society which elects delegates to serve more than one year to provide the KSMA Headquarters Office with a completed certified list of delegates to represent that county for that particular year.

Section 13. The Secretary of each county society shall keep a roster of its members and a list of non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information, upon blanks supplied him for the purpose, to the Secretary of this Association, on the first day of January of each year, or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the Secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Section 14. The secretary of each county society shall report to the Journal of the Kentucky State Medical Association full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

Chapter XIII. Amendments

These by-laws may be amended by any annual session by a two-thirds vote of all the delegates present at that session, after the amendment has been laid on the table for one day.

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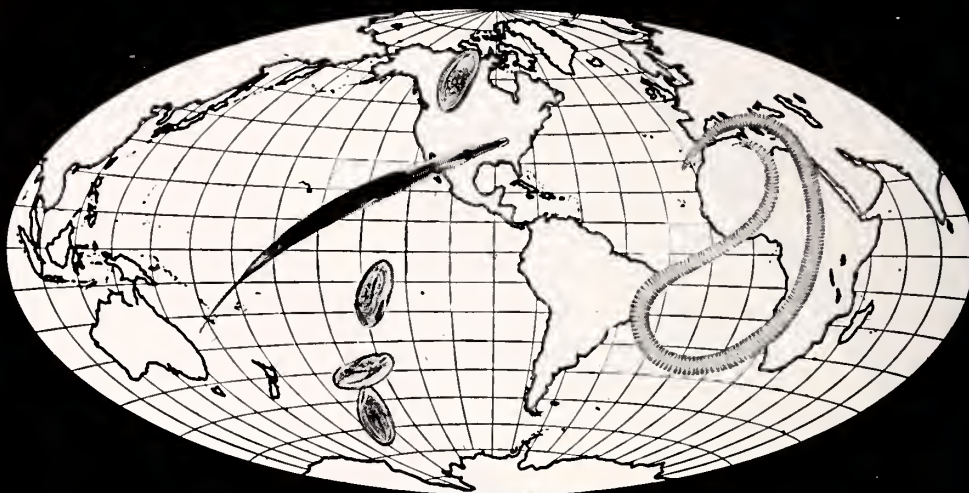
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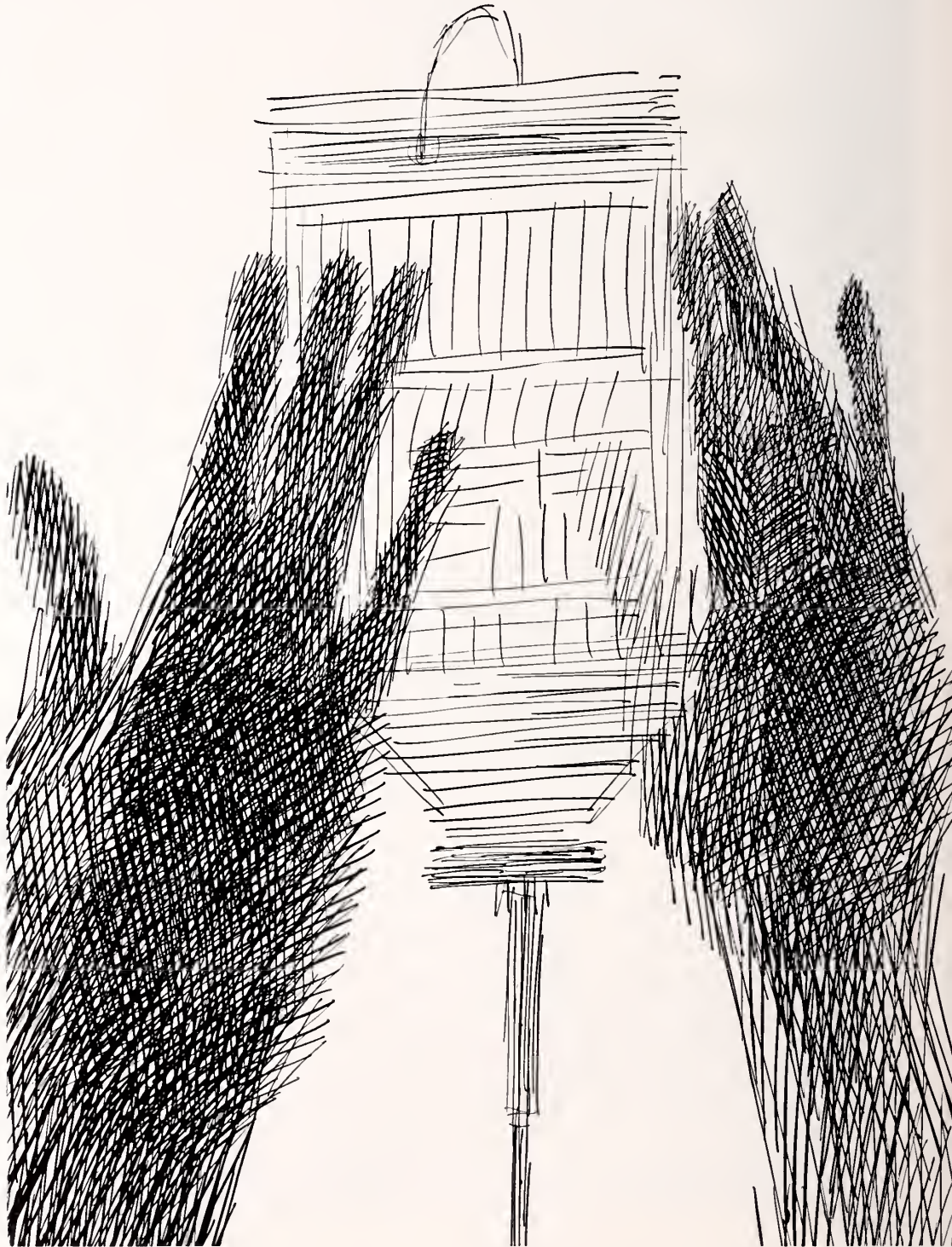
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Supplied: 10 cc. multiple-dose vials. The adult dosage is 25 mg. to 50 mg. (1-2 cc.) intramuscularly, 3 to 4 times daily, at 4 hour intervals. The moderated dosage level for children under 12, when given intramuscularly, has not yet been established, and the oral dosage should be used.



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TWO NEW
CLINICAL
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THE
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GELATINE FOR



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Evidence continues to accumulate verifying the effectiveness of Gelatine in the treatment of brittle fingernails. Investigators report that the nails show objective evidence of improvement.^{1,2,3,4} Furthermore, patients often volunteer that their nails "feel stronger," "look smoother," and "I can pick up things without them hurting."¹ Evidently the subjective sensations associated with improvement are nearly as important to some patients as the positive physical change in the nails' appearance.

Improvement Noted in 81% of Patients

See the chart below for a summary of the effect of Knox Gelatine in brittle fingernails as observed in all published reports. Photographic evidence of improvement, much of it in color taken before and during treatment, is available for most of the patients.^{1,2,3} Please note, however, that where Gelatine was used in the treatment of pathological conditions associated with brittle fingernails only in psoriasis did the data show definite improvement.^{1,3,4}

Response to Gelatine in Brittle Fingernails

References	Dosage	Duration of treatment	No. patients w/ brittle nails	No. patients improved	No. patients w/ brittle nails and other pathology	No. patients improved
1. Rosenberg, S., Oster, K. A., Kallos, A. and Burroughs, W.: <i>A.M.A. Arch. Dermat.</i> 76:330, (September) 1957	7 Gm./day	3 months	50	43 (86%)	32 ^a	9
2. Schwimmer, M. and Mulinos, M.G.: <i>Antibiot. Med. & Clin. Therapy</i> 4:403, (July) 1957	7.5 Gm./day	11-16 weeks	18	15 (83%)		
3. Rosenberg, S. and Oster, K. A.: <i>Conn. State Med. J</i> 19:171, (March) 1955	7 to 21 Gm./day	15 weeks	36	26 ^b (72%)		
4. Tyson, T. L.: <i>J. Invest. Dermat</i> 14:323, (May) 1950	7 Gm./day	13 weeks	12	10 ^c (83%)		
Totals	7-21 Gm.	11-16 weeks	116	94 (81%)	32	9 (28%)

- Gelatine improved psoriatic nails in 5 out of 12 cases. In onychomycosis and other pathological conditions of the nail it was of no appreciable help.
- Of the failures, 2 had congenital disease of the nails, 3 were diabetics and 3 took the medication for less than one month.
- One patient with psoriasis and arthritis and one patient with psoriasiform nail changes showed improvement in 2 and 3 months respectively.

BRITTLE FINGERNAILS

Important Note

The pharmacodynamic effects of Gelatine are manifested through its high Specific Dynamic Action, and therefore, depend upon adequate and prolonged intake. All published clinical research has been conducted using 7 to 21 grams (1-3 envelopes) of Knox Gelatine per day for the three to four months that are required for complete regrowth of the nails. Smaller dosage would induce a lesser specific dynamic action and thus prove ineffectual in correcting the brittle nail defects. More detailed information on brittle fingernails and reprints of the two more recent clinical reports are available on request. Please use the attached coupon.

Knox Gelatine Company
Professional Service Department SJ-27
Johnstown, N. Y.

Please send reprints of the following articles:

- ☐ Rosenberg, S., Oster, K. A., Kallos, A. and Burroughs, W.: *A.M.A. Arch. Dermat.* 76:330, (Sept.) 1957.
- ☐ Schwimmer, M. and Mulinos, M.G.: *Antibiot. Med. & Clin. Therapy* 4:403, (July) 1957.

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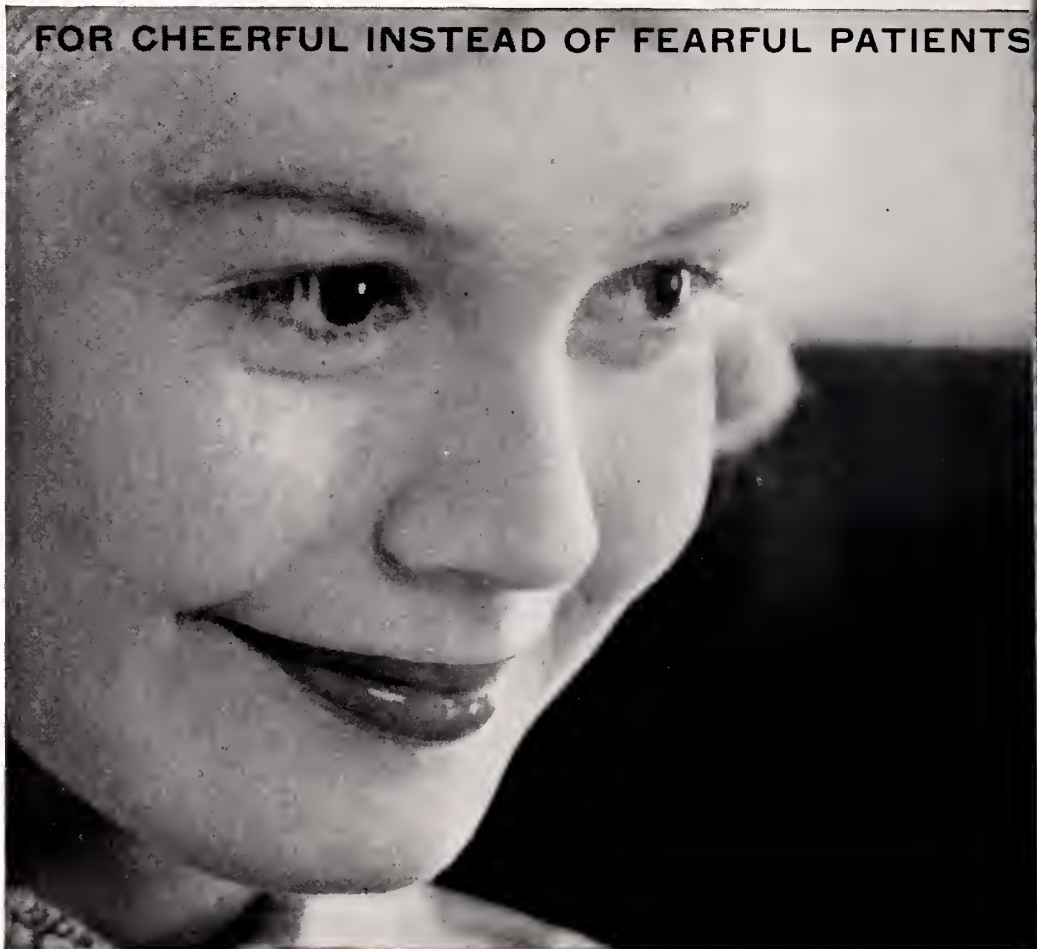
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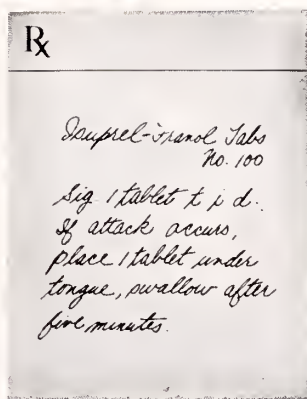
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¹Fromer, J. L., and DeRisio, J.: *Lahey Clin. Bull.* 10:45, Jan.-Dec., 1956.

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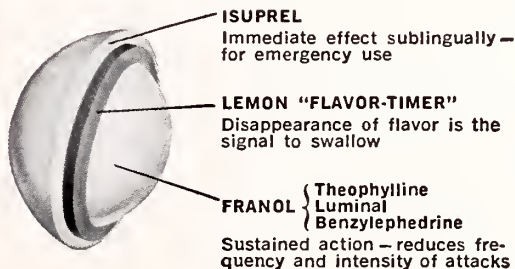
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"Flavor-timer" signals patients when to swallow tablets



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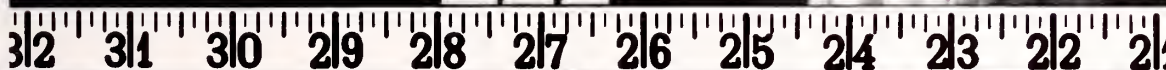
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Chemically different from the amphetamines,
PRELUDIN provides potent appetite suppression with little
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- **rarely causes loss of sleep**¹—may be given late enough
in the day to curtail after-dinner "nibbling," yet not hinder sleep.
- **avoids nervous tension and "jitters"**²—simultaneous
sedation is not required.³

"...in clinical use the side-effects of nervousness,
hyperexcitability, euphoria, and insomnia are much less than
with the amphetamine compounds and rarely cause difficulty."⁴

References: (1) Gelvin, E. P., McGovack, T. H., and Kenigsberg, S.: *Am. J. Digest.*
Dis. 1:155, 1956. (2) Hall, J. O. S., Jr.: *Dallas M. J.* 42:497, 1956.
(3) Natenshan, A. L.: *Am. Pract. & Digest Treat.* 7:1456, 1956. (4) Council on
Pharmacy and Chemistry, *New and Nonofficial Remedies*: J. A. M. A.
163:356 (Feb. 2) 1957.

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ARALEN[®] *in* RHEUMATOID ARTHRITIS

Extensive studies of rheumatoid arthritis and related collagen diseases—in this country and abroad—have shown the antimalarial Aralen phosphate to be highly effective and well tolerated in a large percentage of patients.

Clinical Results with Aralen in Rheumatoid Arthritis

Author	No. of Cases	Major Improvement	Minor Improvement	No Effect
Haydu ¹	28	22	5	1
Rinehart ²	25	12	4	9
Freedman ³	50	43	3	4
Bagnall ⁴	108	77	12	19
Bruckner ⁵	36	32	0	4
Cohen and Calkins ⁶	22	17	3	2
Scherbel et al. ⁷	25	9	8	8
Total	294	212 (72%)	35 (12%)	47 (16%)

- Success dependent upon persistent treatment
- Often of benefit where other agents have failed
- Remissions on therapy well maintained
- Remission of 3 to 12 months possible even if treatment is interrupted
- Tachyphylaxis not evident

GENERAL EFFECTS:

- Patient feels better
- Patient looks better
- Exercise tolerance increases
- Walking speed and hand grip improves

LABORATORY EFFECTS:

- E. S. R. may fall slowly
- Hemoglobin level may gradually rise

ANALGESICS AND STEROIDS:

- Requirements usually reduced or eliminated

JOINT EFFECTS:

- Pain and tenderness relieved
- Mobility increases
- Swellings diminish or disappear
- Muscle strength improves
- Rheumatic nodules may disappear
- Even severe or advanced deformity may improve
- *Active* inflammatory process usually subsides
- Joint effusion may diminish

DOSAGE:

Aralen is cumulative in action and requires four to twelve weeks of administration before therapeutic effects become apparent.

Latest information indicates that an initial daily dose of 250 mg. of Aralen phosphate is preferable to the higher doses sometimes recommended. However, if side effects appear, withdraw Aralen for several days until they subside. Reinstate treatment with 125 mg. daily and, if well tolerated, increase to 250 mg. The usual maintenance dose is 250 mg. daily.

INDICATIONS:

- Rheumatoid arthritis, acute or chronic —with or without adjunctive therapy.
- Spondylitis
- Arthritis associated with lupus erythematosus or psoriasis

HOW SUPPLIED:

Aralen phosphate: 250 mg. tablets in bottles of 100 and 1000.
125 mg. tablets in bottles of 100.

Tolerance:

Aralen is usually well tolerated. Toxic effects are usually mild and to date have been transitory in nature, disappearing completely either on continuance or cessation of therapy or on reduction in dosage.

Gastrointestinal disturbances (e.g. nausea, rarely vomiting, diarrhea, abdominal cramps, anorexia) are frequent manifestations of intolerance. Temporary blurring of vision (due to interference with accommodation) is also relatively frequent.

Pleomorphic skin eruptions (e.g. lichenoid, maculopapular, purpuric), although generally mild, may preclude the use of an optimum dosage schedule. If a skin reaction persists on a reduced dosage schedule, or recurs after reinstitution of treatment with gradually increasing doses, discontinue Aralen till the lesion again disappears and consider resuming treatment with Plaquenil® (brand of hydroxychloroquine).

Less frequently transitory vertigo, headache, lassitude, or neurological disturbances, such as nervousness, irritability, emotional change, and nightmares have been reported. Instances of unexplained slight gradual weight loss as the patient's general health and arthritic condition improved have been mentioned. Occasional instances of bleaching (depigmentation) of the hair have been described.

Although an occasional instance of leukopenia, with normal differential count, has been reported (WBC about 3000), it has not proved troublesome because it has always been reversible on discontinuance, or diminution of the dose. Even spontaneous reversal may occur while full dosage is maintained.

THEORY OF ACTION:

Aralen appears to suppress or induce remission of rheumatoid inflammatory processes by inhibiting adenosinetriphosphatase.

Caution:

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"Out of the 36 rheumatoid arthritis cases we treated . . . favorable results were obtained in 32 cases."

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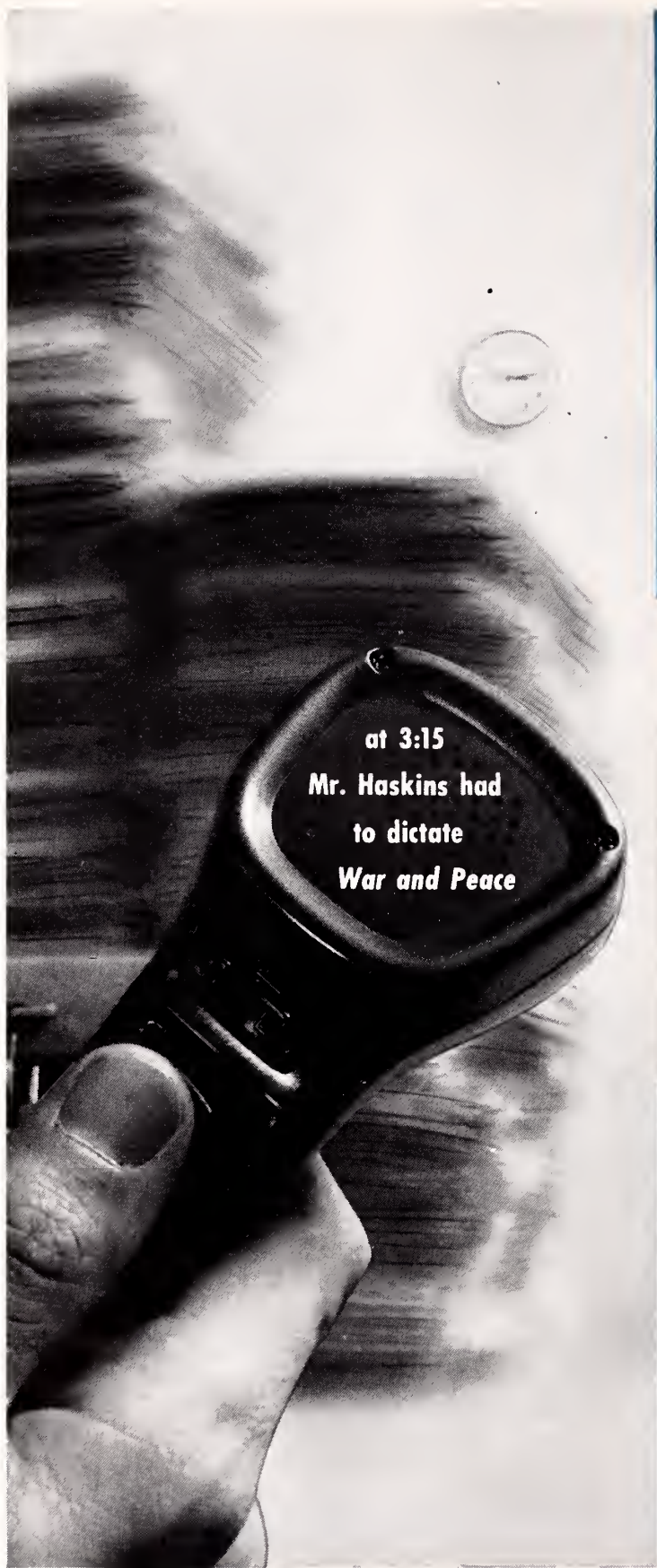
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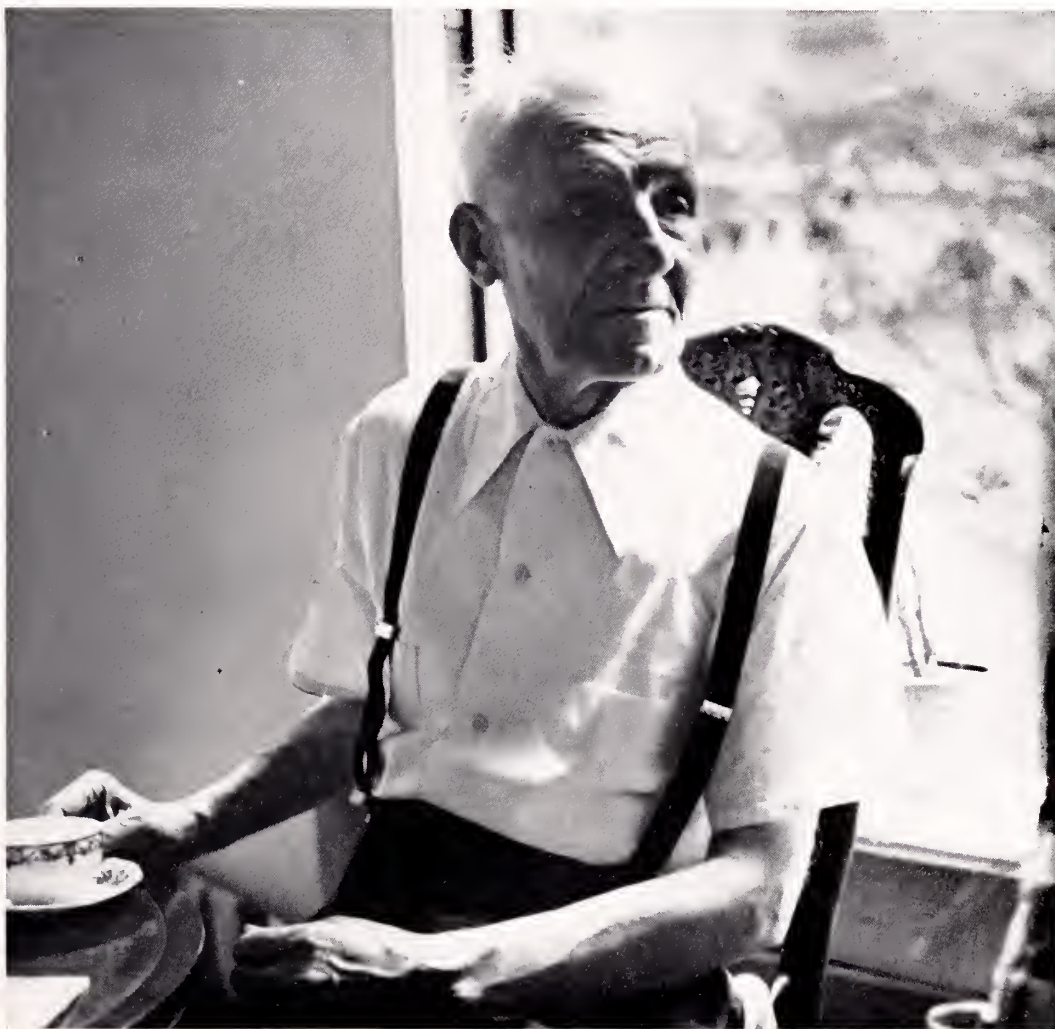
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